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THE MALARIA PROBLEM OF THE SOUTH.¹

By H. R. CARTER, Assistant Surgeon General, United States Public Health Service.

The hot countries are preeminently the home of protozoal infections, and in the southern parts of the United States one such disease, malaria, stands foremost for the injury it does. In that section not one of the bacterial diseases is in its class in this respect, not even excepting tuberculosis. And here, let me say, that in making this statement, I am only considering such parts of the South (and Southwest) in which malaria prevails *to such an extent as to create a serious sanitary problem*. In many sections of the South it is no problem at all; in many others it is a very minor problem; but in those sections where it is really prevalent, the question of malaria easily constitutes the most important sanitary problem with which we have to deal. There it stands first on the list for the injury which it does the community.

It is true that malaria does not give the highest or even a high mortality. Tuberculosis, pneumonia, and typhoid fever run well above it. But is recorded mortality an accurate measure of the comparative injury done by disease? If it were, tonsillitis and Riggs disease would be considered harmless. One of our southern health officers says: "We must direct our work against that group of diseases which gives the heaviest mortality, because the reduction of mortality is, in the last analysis, the measure of our success." I count him wrong in his standard of success; doubly wrong if he understood "mortality" to be the same as "recorded mortality." The recorded mortality of a disease frequently does not indicate its true influence on the death rate. This is eminently true of malaria. From its effects, physical and economic, in lowering the general vitality of a community, it is a causal factor in many a death in which it is not the *terminal* factor, the one recorded as the "cause of death." *Mortality statistics do not, then, give the proper weight of this disease as a cause of death.*

It is not in its death rate that the gravest injury of malaria lies: It is in its sickness rate, in the loss of efficiency it causes, rather than in the loss of life. One death from pneumonia ordinarily corresponds to

¹ From an address delivered at the Conference of Sanitary Engineers, Wilmington, N. C., Feb. 17, 1919.

about 125 sick days—work days lost; one from typhoid fever to 450 to 500 sick days; one from tuberculosis to somewhat more than this among whites, decidedly less among negroes. A death from malaria, however, corresponds to from 2,000 to 4,000 sick days. This loss of efficiency may really be doubled or trebled, for the man infected with malaria is frequently half sick all the time.

And it is the *amount of malaria* when it is bad which appalls. If 1 per cent of the population is stricken with typhoid fever, it is an epidemic and a bad one. Contrast this with 40 per cent to 60 per cent of a population per annum affected with malaria, and I have seen outbreaks with 90 per cent, and you gain some idea of the importance of this disease. The loss of efficiency caused by malaria in the country of the malarious section of the South is beyond comparison greater than that caused by any other disease, or even by any two or three diseases combined, including typhoid fever and tuberculosis.

I am not speaking at random. You have never heard of the prevalence of typhoid fever determining the failure to locate industrial plants. Yet, at one place where power from a hydroelectric plant was abundant and very cheap, the manager told me that a number of options for cotton mills, wagon factories, etc.—options which had been taken because of the cheapness of the power—had been abandoned because of the prevalence of malaria.

Has the presence of tuberculosis ever prevented a real estate transaction? I know of a deal involving the purchase of a large tract of land for colonization—a tract valued at about a half million dollars—not consummated on account of the prevalence of malaria in that section, and there was not much malaria either. You have not seen homes abandoned because of either tuberculosis or typhoid fever. I can assure you that I have seen them abandoned on account of malaria.

The importance of the problem, especially as compared to that of other preventable diseases, has not been recognized, and the reason is plain. The sections in which malaria is not prevalent are, partly for that very reason, the most progressive, and, hence, have the best paid and most efficient health organizations. The sanitarians of those organizations are naturally the leaders in sanitary thought for the United States. Malaria is not among their problems, or if so, it is a minor one, and they lay stress on other problems. Influenced by their writings, the comparative importance of health problems for the South and Southwest has not been rightly appreciated by the sanitarians of these sections. I say *has* not advisedly, for it is coming to be appreciated now.

Another thing which has obscured the sanitary importance of malaria is that the most progressive local health officers of the South,

and indeed everywhere, are those of the cities. These men write and speak at conventions—and they write and speak well—and they profoundly influence the sanitary opinions of those who meet them. Now, malaria is not a city disease and it is not one of their problems, and those men in the South itself to whom others look for sanitary leadership are not directly concerned with the most serious problem of the rural districts. I speak from personal knowledge.

Yet another reason is to be found for the nonrecognition of the importance of the malaria problem in the fact that we are so used to malaria. In some sections people are expected to have chills "off and on" for the early years of life, and the occurrence of this disease is looked upon as a matter of course. After childhood an immunity is acquired and the disease is less common, but the child has been handicapped during the time he was growing and getting his education.

Area of Prevalence.

One encouraging fact about malaria in the United States is that the area of prevalence, certainly the area in which it is severe, is lessening. In eastern North Carolina there is not now one-third of the malaria there was in the eighties. I think the same is generally true, though, perhaps, not to the same degree, in all of the cotton States. On the other hand, it has increased in some sections of these and other States.

The reasons for this decrease are interesting and instructive. Primarily, the decrease is due to the rise in the price of cotton and the fall in the price of quinine. The first has led to prosperity for the farmer—and all are farmers here; to better living conditions; to the clearing and draining of more land; and to better clearing and better drainage. (I count drainage, especially tile drainage, the key to the rural malaria problem.) The action of the second causative factor is obvious.

The lessening of malaria due to the prosperity of the farmers reacts, through sequence, favorably on itself. As the people become healthier their energy increases and they become still more prosperous; consequently, more land is put in cultivation and drained, cultivation is cleaner and drainage is better, the houses are screened, and malaria is thus further reduced. And so it goes, forming an endless chain of improvement in which health and prosperity are alternate links. This I was happy to see in many places in the South and Southwest, and I noticed it especially in North Carolina.

Conveyance.

Without going into the question of the conveyance of malaria by the mosquitoes, I will lay down a few postulates:

1. Malaria is caused by parasites in the blood of the person suffering from it. Persons with such parasites in their blood are infected with malaria.

2. Those parasites were injected into the person by the bite of a mosquito infected with the parasite. Man receives infection in no other way.

3. The mosquito herself received this infection by having previously fed on a person whose blood contained such parasites. The mosquito acquires infection in no other way.

4. The only mosquitoes which are infected with malaria are those of the genus *Anopheles*, and not all species of *Anopheles* are efficient carriers of malaria.

The change from man to the mosquito and back again is necessary for the continuous existence of the parasites, just as necessary as that change for the germ of wheat by which it is alternately in the ground and in the air. The malaria parasite can not live indefinitely in the mosquito; it can not live indefinitely, although much longer, in man. Without this continued change between the two hosts the parasite dies. This, then, gives us our clues for malaria control: (1) Keep infected mosquitoes away from man; or (2) keep mosquitoes away from infected men. The control of either host—the mosquito or the man—will eliminate malaria.

Methods of Malaria Control.

Briefly, our methods of malaria control aim to—

1. Get rid of *Anopheles* mosquitoes—no other kinds make any difference in malaria.

2. Prevent the access of *Anopheles* mosquitoes to man.

3. Free all persons in the community from malaria parasites.

4. Protect persons against infection by means of quinine.

So far as the first and second points are concerned no further explanation is necessary.

So far as the third point is concerned it is clear that if all men were free from malaria parasites there would be no way of infecting mosquitoes, and unless infected they can not transmit malaria.

Finally, if men are put in such a state that they can not develop malaria even if bitten by mosquitoes, naturally malaria will be controlled. This it is attempted to do by means of protecting or immunizing doses of quinine.

The first two methods aim at control of the mosquito; the last two, control of the human host. The first and third are community methods; the second and fourth individualistic, but they overlap in this respect.

Which is the best method? There isn't any best method; or, rather, each one of them may be best under certain conditions. Let me explain: Theoretically, the first method—getting rid of mosquitoes—is absolutely effective. Moreover, it has been proved at Port Said, at Panama, and at a dozen places in the United States, that if the production of *Anopheles* mosquitoes is controlled, malaria is controlled or eliminated. Furthermore, it is always physically possible to control the production of these mosquitoes. Why, then, should we consider any other method? Because it is not everywhere that this production can be controlled within the *allowable economic limit*.

I will not go into the methods of controlling *Anopheles* production. They rest on the destruction of breeding places by (a) removing, by draining or filling, the water in which they breed, or (b) rendering it unfit for breeding, by current, oil, larvicides, fish, etc., or a combination of them.

Although not the only method of malaria control, and in some cases not the advisable method, the control of *Anopheles* production is the one depended on in most of the work heretofore done in the South, quite frequently with screening (itself an antimosquito measure) as an adjuvant. In my opinion, whenever the control of *Anopheles* production is not prohibited by the cost, it is the method of choice. It has these advantages:

(1) The main work is done once for all and the upkeep is usually small.

(2) The work is done with materials—earth, water, etc.—and not with people. Health officers will know that no material is so refractory to work with as people.

(3) Both the installation and the upkeep are carried out directly under the supervision of the health officer, and the result can not be vitiated by individual carelessness, crankiness, or bad faith.

Compared with the individualistic methods, this method is like a municipally-sterilized water supply compared with individually-sterilized drinking water. The former gives the heaviest cost, but it is the least troublesome and, to the community, is the safest. It is very generally applicable to villages and thickly settled communities; less frequently applicable to sparsely settled districts. The reason is obvious: The expense of control of mosquito production in a community is roughly proportional to the *area* of breeding

which lies within the limits of flight to the dwelling section of that community. The benefits of such control, and, hence, the funds allowable to spend on it are proportional to the population. It is obvious, then, that *the expense per head for this work increases and decreases inversely as the population per unit of area.*

In practice where we have tried it for villages and closely settled communities it has not proved costly—at least, I hope you will not think so—for the results obtained. Let me give you some figures:

Roanoke Rapids, N. C., is a mill village, or rather a group of mill villages, with a total of over 4,000 population. Prior to the malaria work the population was continually changing. Wages were good, work was abundant, and people came, but they developed malaria and would not stay. The mill managers estimated the efficiency of their employees at from 40 to 60 per cent during the four unhealthful months. During this time machines were constantly idle. The mill physicians, who attended employees without charge, averaged during the summer months for 1912 and 1913, fifty calls per day for malaria. During 1914, the first year of malaria work (control of mosquitoes was depended on), there were still a few cases (33) of malaria, relapses from 1913. The efficiency rate rose to 90 or 95 per cent, and the average number of calls for malaria for the same months was three daily. In 1915 there was no question of efficiency to be considered—it was normal. The average of doctors' calls for malaria was 1 in three days. All these were in newcomers and were believed to have been contracted elsewhere.

One of the millmen writes: "The money spent in your campaign against malaria here gave the quickest and most enormous returns I have ever known from any investment." It did pay in the first year from 100 to 400 per cent.

The cost here was 80 cents per head for the first year and 27 cents per head for the second year. The efficiency of the mill was raised from 50 to 100 per cent (normal).

Wilson, Va., is a community only moderately thickly inhabited, not a village. It has been subject to malaria for many years, ever since it was settled, I presume, and of late years the conditions had been getting worse. In 1915 they were bad. Every house I visited in early October had a sick inmate and in some houses there were several. No record of cases was kept, but there were 5 deaths in August, which should correspond to at least 500 cases. The work was expensive and the community, poor on account of malaria, had to be helped. With what was done by the railroad (partly for economic reasons, because the work pays for itself), it cost about \$12 per head. Exclusive of this the cost was \$3.40 per head, which is very high.

Yet, only one single case of malaria, a relapse, appeared there this year and I judge the work was worth its cost. It is the best result I have ever known. Next year it will not cost over 25 cents a head—except for repairs to screening, which would be done anyhow for comfort's sake. Wilson was costly because the area to be handled was sparsely settled and it was, therefore, not a good place in which to make a showing. Now let us turn to a larger town where we can make a better showing in cost per head.

Crystal City, Mo., has 8,000 population. The expense here was \$7,080. An unnecessary error in cutting the ditches made the cost somewhat greater than it need to have been. So far as the results are concerned the health officer states that malaria was reduced from 80 to 90 per cent. A sickness-insurance company paid in this town, in 1915, benefits to 12½ per cent of its policyholders and in 1916 to 2.9 per cent. This would give a reduction of from 75 to 80 per cent which, counting the usual relapses, should mean a reduction of from 90 to 95 per cent in cases contracted in 1916. The expense was 88½ cents per head, though it should have been decidedly less. Next year it will be not over 25 cents per head.

I could cite you a number of cases like these. In Crossett, Ark., for example, there was a reduction of malaria for the summer of 1916 from 1,650 cases to 288, which is equivalent to a reduction of 82½ per cent. The September ratios, when most of the relapses are eliminated, are 600 and 46—a reduction of 92½ per cent. This reduction was still further increased in 1917. Derivaux, of the United States Public Health Service, and Taylor, of the International Health Board, did this work, which was financed by the Rockefeller Foundation. It is as good work in malaria as had ever been done anywhere.

I will not have time to more than mention the other methods. Screening has been used where control of production of *Anopheles* mosquitoes was impracticable, and has given good results, but not so good as those obtained from the latter method.

A demonstration of the third method, that of freeing all persons in a community from malarial parasites, was undertaken in 1916 and 1917 by the Rockefeller Foundation at Bolivar County, Miss. This work was carried on under the supervision of Dr. Bass, of New Orleans, and Dr. Leathers, the health officer of Mississippi. I understand that it was successful, but do not know the details.

Quinine immunization has not been tried out scientifically on a large scale in the United States, for, excepting, possibly, the work done in Bolivar County, above alluded to, nowhere in the United States has this method been extensively employed.

Under our political organization the Federal Government can not do antimalaria work as described above except as a demonstration. Demonstrations we have made, and it has been our aim to show communities:

- (1) That control of malaria is feasible;
- (2) That control of malaria is profitable;
- (3) And, finally, how to control malaria.

When the above is known and really *believed*, the people will go to work, each unit for itself, and the problem of malaria control will be in the way of solution.

Quite a number of demonstrations were made by the United States Public Health Service during the three years preceding the war. The service makes the malaria survey, plans the work in detail, and supervises it as much as is necessary or possible. The communities mainly bear their own expense, the industrial companies in them contributing the greater share. One State (Virginia) has helped finance demonstrations carried on within its bounds. These demonstrations were made at Wilson and Emporia. No other State, so far as I know, has done so. The Rockefeller Foundation, through the International Health Commission, has financed two demonstrations in Arkansas. They have all been successful, eminently so, and not costly. They were made to prove the value of antimosquito work for the control of malaria in the United States; and, if I am a judge, they have proved it.

The advantage of a demonstration in a community is that, if it be a real success, it induces neighboring communities to emulate it and may lead to a very considerable amount of malaria-control work. No community has ever abandoned the work when once it had felt its benefits.

In addition to the demonstrations spoken of, we have visited many places as consultants, so to speak, making malaria surveys—to get a knowledge of the condition of the community and thereby determine what is needed—then giving advice and drawing up plans for the control of malaria, but without following out the actual work to the extent of making it a demonstration. Some of these communities do good work; some do nothing. We have now, however, pretty well learned from which communities results can be obtained, and do not lose much time on the others. We did not know at first.

Some of these consultations have been made in connection with rather extensive drainage projects, in order to control malaria as much as possible while the land was being made suitable for agriculture. Some have been made in connection with rice culture and have presented most difficult problems in some places. Some have been with people contemplating the construction of hydroelectric

plants, the problem being to minimize the amount of malaria (and consequent damage suits) caused by the impounded waters. Sometimes this, too, presents considerable difficulties and may involve much work, but it is exceedingly important, and, I am sure, profitable, from a sanitary standpoint.

There is not time to discuss the research work which we have done on this problem; the statistics of morbidity we have gathered, the mere gathering of which has now and then been a factor in inducing States to make malaria a reportable disease and become interested in antimalaria measures; the blood-index work to determine the degree and the nature of the infection of communities; the problems which have come up from time to time, the solution of which was necessary to progress. I do not need to tell you who have worked with mosquitoes, how many problems of botany, of entomology, of agriculture—yes, and of geology and meteorology—come up in working out the problem of the control of mosquitoes. And besides all these, we have those in human pathology and the action of drugs in man, because the control of mosquitoes is only one of the methods of controlling malaria. Yet, I think I must mention the determination by Mitzmain,¹ of the Public Health Service, that the parasites of malaria did not live through the winter in the mosquitos which hibernate in central Mississippi.² This determination rendered logical the demonstration undertaken by the Rockefeller Foundation in that State which otherwise had been illogical. That all three of the common varieties of *Anopheles* in the eastern part of the United States are infectible with and can convey malaria has been shown by King, of the Entomological Bureau, and Mitzmain. This is a most important thing and one which we did not know before.

A study of the effects of large bodies of impounded water on the production of malaria has been carried on for the past three years. Valuable data have been secured and methods of minimizing the effect, when it exists, have been worked out and applied.

Nor is there time here to more than allude to what has been done to spread a knowledge of malaria and its control among the people. Much has been done in this matter by bulletins, leaflets, lectures, lantern slides, exhibits, etc., and it is bearing some fruit. I pin my faith, however, to two educational methods: (1) Teaching the basic facts of malaria conveyance and control in the schools of the malarious districts in order that the children may grow up with a definite and correct knowledge on this subject; and (2) the demonstration of malaria control. For the adult population there is no method of equal educational value.

¹ Mr. Mitzmain's name has been legally changed; it is now Bruce Mayne.

² Is Mosquito or Man the Winter Carrier of Malaria Organisms? M. Bruin Mitzmain. *Public Health Bulletin No. 84*. 1916.

"WHAT WE KNOW ABOUT CANCER."**A HANDBOOK FOR THE MEDICAL PROFESSION.**

Admirably supplementing the layman's bulletin on cancer just published by the United States Public Health Service,¹ a 54-page handbook prepared especially for physicians, "What We Know About Cancer," has now been published under the joint auspices of the American Society for the Control of Cancer and the Council on Health and Public Instruction of the American Medical Association.

In a foreword the purposes of this publication are stated to be "to provide in a brief and readily accessible form the important facts about cancer in general, and its manifestations in the different situations where it most commonly occurs."

Responsibility for the control of cancer is placed largely on the physicians. "It is a well-known fact," says the handbook, "that a considerable proportion of malignant tumors are not recognized by the doctor when the patient presents the indefinite early symptoms of the disease. Optimism too often replaces a careful physical examination. The great majority of cancers of the rectum are to-day treated as hemorrhoids for from one to six months. Uterine discharges are often not properly investigated, and curettings are not examined. Cancer of the tongue and mouth is permitted to advance because there is a positive Wassermann. Metastases are produced by repeated rough examinations. Malignant moles and epitheliomas of the skin are imperfectly removed. Clearly inoperable cases are operated on, thus bringing operation into disrepute."

The publication definitely discards the parasitic theory of cancer, states that cancer is not communicated from person to person, that heredity plays practically no part as an etiological factor, and emphasizes, above all, the influence of chronic irritation as a direct or indirect predisposing influence to cancer.

The place of radium, Röntgen ray, and the cautery are clearly indicated. So far as radium treatment is concerned the handbook points out that this treatment "is a safe method only for superficial cancers of the skin of the nonmetastasizing types, or for other forms of surface cancer which have been in existence so short a time that metastasis to the regional lymph nodes can not possibly have already taken place."

A strong warning is sounded against quack remedies, patent medicines, and the like. "Fake 'cancer cures' and herb and Indian doctors * * * increase enormously the mortality from cancer. * * * The patient is encouraged to expect relief, until his

¹Cancer: Facts Which Every Adult Should Know. See Public Health Reports, vol. 34, No. 33, Aug. 15, 1919, p. 1833.

money is exhausted and his disease is too far advanced for cure by operation, when he finally drifts to the charity hospitals, where his sufferings can be controlled only by opiates, and he dies a lingering death, offensive as well to himself as to all with whom he comes in contact."

Of special interest to the physician are the chapters on diagnosis and treatment. On the question of exploratory operations the book urges caution, for "to cut into cancer tissue *in situ*, undoubtedly adds to the danger of dissemination of the disease. In certain regions, however, the radical operation for cancer involves such great operative risk and such serious mutilation, that it can not with justice to either patient or physician be advised on anything but a positive diagnosis."

More than half of the book is devoted to a discussion of carcinoma of different organs. For each of these there is given in succinct form the symptoms, differential diagnosis, the precancerous lesions, the standard operative treatment, and the results which may reasonably be expected.

Sarcoma and other malignant tumors are next discussed, and there is a final chapter on the treatment of inoperable or recurrent cancer.

Altogether this publication embodies the consensus of the best present-day medical opinions concerning cancer, and its careful study by physicians everywhere is most earnestly to be desired.

AMERICAN PUBLIC HEALTH ASSOCIATION TO MEET IN NEW ORLEANS.

The next annual meeting of the American Public Health Association is to be held at New Orleans, La., October 27-30, inclusive. The central themes of discussion will be Southern health problems, including malaria, typhoid fever, hookworm, soil pollution and the privy, etc.

In view of the possibility of a recurrence of influenza next winter, a full session will be devoted to this subject for the purpose of developing methods of control.

A special effort has been made to arrange the program to meet the practical needs of health officials. Accordingly, there will be discussion on such questions as the attitude of legislators toward public health, the obtaining of appropriations, cooperation from women's clubs and health organizations, and the organization of health centers.

The programs of the sections will, as usual, deal with public health administration, vital statistics, sanitary engineering, laboratory methods, industrial hygiene, sociology, and food and drugs.

Two special programs will also be presented on various phases of child hygiene and personal hygiene.

The program of the meetings will be published in the American Journal of Public Health appearing October 5 or may at that time be had upon application to the Secretary, 169 Massachusetts Avenue, Boston, Mass.

Winter railroad rates to New Orleans will be in effect from all points after October 1.

VENEREAL DISEASES.

QUARANTINE OF INFECTED PERSONS UPHOLD BY TEXAS COURT OF CRIMINAL APPEALS.

The Court of Criminal Appeals of Texas has again held¹ that a person who is infected with a venereal disease may be quarantined until the disease is no longer communicable.

A woman, found to have syphilis, was ordered by the health officer of Houston to be confined for treatment at the city farm. She applied for a writ of habeas corpus to secure her release, but this was denied by the court. One of the contentions made in her behalf was that she had been given numerous tests and that some showed positive results and some showed negative results. Regarding this the court said:

* * * Nothing is thus presented for our decision. If relator is free from syphilis or gonorrhea she may present her application for writ of habeas corpus to the local courts under the authority of *ex parte Hardcastle*,² decided by us at this term, and if free therefrom may be discharged. The courts will understand that the health officers have no right or power to hold in quarantine citizens who do not show the presence of some of the diseases named in chapter 85 of the acts of the fourth called session of the thirty-fifth legislature.

In conclusion it was stated:

* * * We think the provision of said act that such patients should be confined for treatment until declared cured by official pronouncement is not unreasonable, unjust, or arbitrary. Our attention is not called to any authorities holding this or other similar acts violative of any of the provisions of our Constitution, or discriminatory, arbitrary, or unreasonable.

CLEANING OF SURFACE CLOSETS AND PRIVIES.

ORDINANCE PROVIDING FOR CLEANING OF SURFACE CLOSETS AND PRIVIES HELD VALID BY NORTH CAROLINA SUPREME COURT.

An ordinance requiring the cleaning and inspection, under supervision of the city, of all surface closets and privies, making an assessment for such work, and providing for the sale of the land in case

¹ *Ex parte Brooks*, 212 S. W., 956.

² 208 S. W., 531; *Public Health Reports*, July 4, 1919, p. 1489.

of nonpayment, has been held valid by the Supreme Court of North Carolina.¹

The city of Gastonia, under authority of Laws 1917, chapter 136, subchapter 7, section 4, adopted an ordinance containing the above provisions. The plaintiff, a property owner, failed to pay the required assessments and the city advertised some of his property for sale. He applied for an injunction against the sale of the property, but this was refused by the court, which sustained the validity of the ordinance. In the opinion it was said:

* * * We think this ordinance is a valid exercise of the power reposed in the town authorities for the protection of the health of the people of the town, and that it is fully authorized by the powers expressly conferred by section 4, subchapter 7, chapter 136, Laws 1917, above recited. * * *

The necessity of sanitation is fully recognized and is becoming of more and more importance with the knowledge which we obtain of the causes of disease and death. It would be impossible to maintain that cleanliness, which is as necessary for the protection of health and life as courts and juries and the administration of justice are * * * [for the protection of] life and property, unless this is done by public supervision. The narrowness, or selfishness, or ignorance of one man in not keeping his premises in a clean condition, would nullify the action of all the other citizens * * * by turning loose the flies and other insects which may carry the seeds of disease to other homes throughout the city. This general supervision can not be maintained by collecting the charges for that service from the renter, who may be here to-day and elsewhere to-morrow. The party responsible is the owner of the premises. The land can not move. The renter or temporary occupant can do so at will. Therefore the charge is a very proper and necessary one against the property itself, and is authorized by the statute in the same way that the * * * [payment for] adequate paving of the sidewalk and streets and * * * [for] sewerage [is authorized]. * * *

The town authorities not only have the power to impose such duty upon the land for the necessary protection of the health of the citizens, but they would be derelict in their duty as such officials, and in proper cases liable to indictment, for failure to protect the health of the public by such necessary regulation. * * *

The public health is a matter of importance to the entire neighborhood, and especially to all the inhabitants of a town or city, for the indifference or ignorance or neglect of one man will nullify the precautions taken by all others in that locality. Such ordinance as is here in question is a necessary protection which will be extended in its scope with the increase of knowledge, and can never be diminished. The requirements of sewerage will be better than [those of] such ordinance as this which * * * [provides] the minimum [requirements].

¹ *Ratchford v. City of Gastonia et al.*, 99 S. E., 21.

DEATHS DURING WEEK ENDED AUG. 9, 1919, IN CITIES.

From the "Weekly Health Index," Aug. 12, 1919, issued by the Bureau of the Census, Department of Commerce.

Deaths from all causes in certain large cities of the United States during the week ended Aug. 9, 1919, infant mortality (per cent), annual death rates, and comparison with corresponding week of preceding years.

City.	Population July 1, 1918, estimated.	Week ended Aug. 9, 1919.		Average annual death rate per 1,000. ²	Per cent of deaths under 1 year.	
		Total deaths.	Death rate. ¹		Week ended Aug. 9, 1919.	Previous year or years. ³
Albany, N. Y.	112,565	39	18.1	C. 13.9	15.4	C. 23.3
Atlanta, Ga.	201,732	62	16.0	C. 15.0	11.3	C. 8.6
Baltimore, Md.	669,981	177	13.8	A. 19.5	22.0	A. 26.7
Birmingham, Ala.	197,670	42	11.1	A. 16.2	14.3	A. 17.4
Boston, Mass.	785,245	167	11.1	A. 13.6	22.8	A. 22.2
Buffalo, N. Y.	473,229	118	13.0	C. 18.8	25.4	C. 32.2
Cambridge, Mass.	111,432	24	11.2	A. 13.2	25.0	A. 21.7
Chicago, Ill.	2,596,681	574	11.5	A. 15.7	23.7	A. 23.0
Cincinnati, Ohio.	418,022	95	11.9	C. 16.5	17.9	C. 10.6
Cleveland, Ohio.	810,306	137	8.8	C. 14.7	42.3	C. 30.7
Columbus, Ohio.	225,296	33	12.3	C. 18.7	17.0	C. 13.6
Dayton, Ohio.	130,655	28	11.2	C. 20.4	14.3	C. 11.8
Denver, Colo.		57			10.5	
Fall River, Mass.	128,392	24	9.7	C. 21.1	45.8	C. 59.6
Grand Rapids, Mich.	135,450	14	5.4	C. 8.5	21.4	C. 22.7
Indianapolis, Ind.	290,389	70	12.6	C. 16.4	12.9	C. 16.5
Jersey City, N. J.	318,770	60	11.3	C. 17.2	27.5	C. 30.5
Kansas City, Mo.	313,785	71	11.8	C. 15.5	9.9	C. 24.7
Los Angeles, Calif.	568,495	79	7.2	A. 11.8	10.1	A. 11.4
Louisville, Ky.	242,707	50	10.7	C. 19.3	6.0	C. 18.9
Lowell, Mass.	109,081	32	15.3	A. 19.4	53.1	A. 35.8
Memphis, Tenn.	154,759	49	16.5	C. 18.2	22.4	C. 9.3
Milwaukee, Wis.	453,481	73	8.4	A. 9.6	15.1	A. 21.5
Minneapolis, Minn.	383,442	74	10.1	C. 10.2	13.5	C. 10.7
Nashville, Tenn.	119,215	33	14.4	C. 25.4	21.2	C. 15.5
Newark, N. J.	428,684	79	9.6	C. 15.3	19.0	C. 22.2
New Haven, Conn.	154,865	23	7.7	C. 13.5	8.7	C. 17.5
New Orleans, La.	382,273	116	15.8	A. 18.5	18.1	A. 14.8
New York, N. Y.	5,215,879	1,091	10.9	C. 14.1	20.0	C. 20.6
Oakland, Calif.	214,206	35	8.5	A. 9.4	5.7	A. 12.3
Omaha, Nebr.	180,264	31	9.0	C. 13.0	16.1	C. 13.3
Philadelphia, Pa.	1,761,371	344	10.2	*17.2	23.8	*23.8
Pittsburgh, Pa.	593,303	146	12.8	C. 23.6	25.3	C. 29.7
Portland, Oreg.		52			9.6	C. 13.2
Providence, R. I.	263,613	34	6.7	C. 12.9	20.6	C. 21.5
Richmond, Va.	160,719	48	15.6	C. 23.7	12.5	C. 20.5
Rochester, N. Y.	264,856	55	10.8	C. 12.2	14.5	C. 24.2
St. Louis, Mo.	779,951	157	10.5	C. 15.6	5.1	C. 17.1
St. Paul, Minn.	257,699	41	8.3	C. 11.3	12.2	C. 16.1
San Francisco, Calif.	478,530	112	12.2	C. 13.0	8.9	C. 5.0
Seattle, Wash.		39			10.3	A. 11.0
Spokane, Wash.		11			18.2	
Syracuse, N. Y.	161,404	42	13.6	C. 19.1	16.7	C. 33.9
Toledo, Ohio.	262,234	59	11.7	A. 12.9	16.9	A. 17.1
Washington, D. C.	401,681	94	12.2	A. 14.0	21.3	A. 17.0
Worcester, Mass.	173,650	39	11.7	C. 15.3	23.1	C. 29.4

¹ Annual rates per 1,000 estimated population.

² "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1918.

³ Population estimated as of July 1, 1919.

* Data are based on statistics of 1915, 1916, and 1917.

Summary of information received by telegraph from industrial insurance companies for week ended Aug. 9, 1919.

Policies in force.....	40,486,187
Number of death claims.....	6,523
Death claims per 1,000 policies in force, annual rate.....	8.4

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Aug. 16, 1919.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.		ILLINOIS.	
	Cases.		Cases.
Cerebrospinal meningitis.....	1	Cerebrospinal meningitis:	
Diphtheria.....	5	Chicago.....	1
Malaria.....	7	Garfield.....	1
Scarlet fever.....	5	Allens.....	1
Smallpox.....	2	Prophetstown.....	2
Typhoid fever.....	9	Diphtheria:	
Venereal diseases.....	22	Chicago.....	60
Whooping cough.....	24	Mattoon.....	2
		Hindsboro.....	2
		Mooseheart.....	2
		Dexter.....	3
		Pontiac.....	4
		Peoria.....	3
		Belleville.....	3
		Springfield.....	2
		Scattering.....	12
		Gonorrhea.....	391
		Poliomyelitis:	
		Chicago.....	5
		Springvalley.....	1
		West Chicago.....	1
		Highland Park.....	1
		Good Hope.....	1
		Waukegan.....	1
		Seneca.....	1
		Macoupin County—Cahokia Township..	1
		Starnes.....	1
		Scarlet fever:	
		Chicago.....	22
		Scattering.....	7
		Smallpox:	
		Chicago.....	4
		Hillview.....	3
		Galesburg.....	3
		Scattering.....	3
		Syphilis.....	150
		Typhoid fever:	
		Chicago.....	7
		Villa Grove.....	2
		Edwards County—Albion Precinct.....	2
		Franklin County—Eastern Township....	2
		Galesburg.....	4
		Scattering.....	15

(1941)

IOWA.

Cerebrospinal meningitis:	Cases.
Dubuque.....	1
Chancroid.....	2
Diphtheria:	
Cedar Rapids.....	1
Council Bluffs.....	1
Holstein.....	1
Gonorrhea.....	57
Scarlet fever:	
Boone.....	1
Des Moines.....	2
Indianola.....	1
Keokuk County.....	1
Monroe County.....	1
Smallpox:	
Boone.....	1
Davenport.....	1
Norway.....	1
Red Oak.....	1
Jones County.....	3
Syphilis.....	16

LOUISIANA.

Chancroid.....	39
Diphtheria.....	13
Gonorrhea.....	170
Influenza.....	4
Pellagra.....	7
Polioomyelitis.....	1
Smallpox.....	11
Syphilis.....	94
Typhoid fever.....	37

MAINE.

Chicken pox:	
Lewiston.....	1
Diphtheria:	
Madison.....	3
Dexter.....	
Columbia Falls.....	1
Waterville.....	1
Gonorrhea.....	29
Scarlet fever:	
Portland.....	4
Bridgton.....	8
Cutler.....	2
Lewiston.....	1
South Portland.....	1
Waldoboro.....	1
Smallpox:	
Bath.....	3
Orcno.....	1
Syphilis.....	12
Tuberculosis.....	18
Typhoid fever:	
Portland.....	1
Westbrook.....	3
Rockland.....	1
Whooping cough:	
Cutler.....	3

MINNESOTA.

Cerebrospinal meningitis.....	2
Chancreoid.....	3
Gonorrhea.....	82
Polio-myelitis.....	8

MINNESOTA—continued.

Smallpox:	Cases.
Dakota County—Rosemount Township .	1
Lincoln County—Lake Stay Township..	3
Syphilis.....	64

MONTANA.

Diphtheria.....	3
Poliomyelitis:	
Inverness.....	1
Wolf Point.....	1
Scarlet fever.....	7
Smallpox.....	5
Typhoid fever.....	7

NEW JERSEY.

Influenza.....	10
Pneumonia.....	24

NEW YORK.

(Exclusive of New York City.)

Anthrax:	
Candor	1
Cerebrospinal meningitis:	
Fulton	1
Diphtheria	131
Gonorrhea (voluntary reports) ..	81
Influenza	3
Measles	38
Poliomyelitis:	
Fishkill	1
Millerton	1
Burke	1
Marion	1
Pneumonia	8
Scarlet fever	32
Smallpox:	
Alden	1
Interlaken	1
Syphilis	414
Typhoid fever:	
Tonawanda	33
Scattering	45
Whooping cough	83

NORTH CAROLINA.

Cerebrospinal meningitis.....	5
Chancroid.....	5
Chicken pox.....	2
Cholera infantum.....	1
Diphtheria.....	47
Dysentery (amebic).....	1
Dysentery (bacillary).....	7
Gonorrhea.....	93
Lethargic encephalitis.....	1
Measles.....	20
Paratyphoid fever.....	1
Poliomyelitis.....	1
Pneumonia (broncho).....	4
Scarlet fever.....	25
Septic sore throat.....	12
Smallpox.....	23
Syphilis.....	40
Typhoid fever.....	29
Whooping cough.....	89

OHIO.		WEST VIRGINIA—continued.	
Smallpox:	Cases.	Typhoid fever—Continued.	Cases.
New Holland.....	6	Huntington.....	3
Typhoid fever:		Keyser.....	3
Warren.....	4	Martinsburg.....	4
Mansfield.....	3	Montgomery.....	1
Lima.....	5	Morgantown.....	4
Steubenville.....	7	New Martinsville.....	1
		Weston.....	3
		Wheeling.....	1
WASHINGTON.		WISCONSIN.	
Chicken pox.....	15	Cerebrospinal meningitis.....	1
Diphtheria.....	19	Chicken pox:	
Gonorrhea.....	15	Milwaukee.....	2
Measles.....	5	Scattering.....	1
Mumps.....	15	Diphtheria:	
Pneumonia.....	2	Milwaukee.....	15
Scarlet fever.....	32	Scattering.....	10
Smallpox.....	37	Measles:	
Syphilis.....	1	Milwaukee.....	4
Tuberculosis.....	9	Scattering.....	6
Typhoid fever.....	6	Ophthalmia neonatorum.....	1
Whooping cough.....	33	Poliomyelitis:	
		Milwaukee.....	10
		Scattering.....	13
		Scarlet fever:	
		Milwaukee.....	3
		Scattering.....	21
		Smallpox:	
		Milwaukee.....	5
		Scattering.....	11
		Tuberculosis:	
		Milwaukee.....	5
		Scattering.....	10
		Typhoid fever:	
		Milwaukee.....	1
		Scattering.....	9
		Whooping cough:	
		Milwaukee.....	22
		Scattering.....	22
WEST VIRGINIA.			
Diphtheria:			
Charleston.....	3		
Huntington.....	2		
Parkersburg.....	2		
Weston.....	6		
Measles.....	3		
Scarlet fever:			
Buckhannon.....	4		
Clarksburg.....	2		
Huntington.....	1		
Smallpox:			
Beckley.....	1		
Clarksburg.....	2		
Grafton.....	1		
Typhoid fever:			
Beckley.....	1		
Charleston.....	5		

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

Tables showing by counties the reported cases of cerebrospinal meningitis, malaria, pellagra, poliomyelitis, smallpox, and typhoid fever are published under the names of these diseases. (See names of these and other diseases in the table of contents.)

The following monthly State reports include only those which were received during the current week. These reports appear each week as received.

State.	Cerebro-spinal meningitis.	Diphtheria.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
Florida (July).....	1	15	182	7	9	1	7	.....	48
Maryland (July)....	4	119	14	202	2	10	127	5	174
Massachusetts (July)	23	428	20	469	.....	5	268	2	70
Minnesota (June)....	.....	260	.....	852	.....	1	177	287	37
West Virginia (July)	3	51	.....	155	3	11	73	84	182
Wisconsin (July)....	18	138	.....	137	.....	80	157	143	20

CEREBROSPINAL MENINGITIS.

State Reports for July, 1919.

Place.	New cases reported.	Place.	New cases reported.
Florida:		Massachusetts--Continued.	
Palm Beach County.....	1	Suffolk County--	
Maryland:		Boston.....	4
Baltimore.....	4	Winthrop (town).....	1
Massachusetts:		Worcester County.....	1
Berkshire County--		Total.....	23
Pittsfield.....	3	West Virginia:	
Bristol County--		Cabell County.....	1
Fall River.....	2	Kanawha County.....	1
Essex County--		McDowell County.....	1
Haverhill.....	1	Total.....	3
Lawrence.....	2	Wisconsin:	
Newburyport.....	2	Marquette County.....	1
Hampden County--		Milwaukee County.....	15
Holyoke.....	1	Racine County.....	1
Middlesex County--		Waukesha County.....	1
Cambridge.....	1	Total.....	18
Everett.....	1		
Lowell.....	1		
Somerville.....	1		
Plymouth County--			
Hingham (town).....	1		
Hull (town).....	1		

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	2	1	Newark, N. J.....	1	1
Boston, Mass.....	1	2	New York, N. Y.....	3	4
Buffalo, N. Y.....	1	1	Norfolk, Va.....	1	1
Chicago, Ill.....	7	3	Paterson, N. J.....	1	1
Cleveland, Ohio.....	1	1	Philadelphia, Pa.....	1	1
Detroit, Mich.....	1	1	Pittsburgh, Pa.....	1	1
Fort Worth, Tex.....	1	1	Providence, R. I.....	1	1
Great Falls, Mont.....	1	1	Salt Lake City, Utah.....	3	1
Ironwood, Mich.....	1	1	San Francisco, Calif.....	1	1
Jersey City, N. J.....	1	1	Savannah, Ga.....	1	1
Los Angeles, Calif.....	1	1	Somerville, Mass.....	1	1
Milwaukee, Wis.....	4	2	Springfield, Ill.....	1	1
Nashville, Tenn.....	1	1			

DIPHTHERIA.

See Telegraphic weekly reports from States, p. 1941; Monthly summaries, by States, p. 1943; and Weekly reports from cities, p. 1953.

LEPROSY.

New Orleans, La., Week Ended Aug. 2, 1919.

During the week ended August 2, 1919, one case of leprosy was reported at New Orleans, La.

MALARIA.**State Reports for July, 1919.**

Place.	New cases reported.	Place.	New cases reported.
Florida:		Maryland:	
Alachua County.....	2	Allegany County—	
Bay County.....	1	Cumberland.....	2
Bradford County.....	1	Caroline County—	
Brevard County.....	1	Federalburg.....	1
Citrus County.....	42	Charles County—	
Clay County.....	7	La Plata.....	1
Columbia County.....	1	Malcolm, R. D.....	2
Duval County.....	11	Waldorf, R. D.....	1
Jacksonville.....	7	White Plains, R. D.....	1
Escambia County.....	3	Brentland.....	1
Pensacola.....	6	Prince Georges County—	
Gadsden County.....	2	North Keys.....	1
Hernando County.....	1	Piscataway.....	1
Hillsborough County.....	1	Dorchester County—	
Tampa.....	6	Eldorado, R. D.....	1
Jackson County.....	1	Baltimore County.....	2
Lafayette County.....	7	Total.....	14
Lee County.....	1		
Leon County.....	3	Massachusetts:	
Levy County.....	25	Middlesex County—	
Marion County.....	35	Frammingham (town).....	9
Palm Beach County.....	2	Plymouth County—	
Pasco County.....	1	Middleboro (town).....	1
Pinellas County.....	1	Worcester County.....	1
Polk County.....	1	Millord (town).....	7
Putnam County.....	2	Northbridge (town).....	2
St. Lucie County.....	3	Total.....	20
Suwannee County.....	3		
Walton County.....	5		
Total.....	182		

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	2		Montclair, N. J.....	1	
Columbus, Ga.....	1		Montgomery, Ala.....	1	
Dallas, Tex.....	27		New Orleans, La.....		1
East St. Louis, Ill.....	28		Petersburg, Va.....	1	
Fort Worth, Tex.....		1	Sacramento, Calif.....	4	
Little Rock, Ark.....	1		San Jose, Calif.....	1	
Macon, Ga.....		1	Savannah, Ga.....	2	
Memphis, Tenn.....	1		Tuscaloosa, Ala.....	2	

MEASLES.

See Telegraphic weekly reports from States, p. 1941; Monthly summaries by States, p. 1943; and Weekly reports from cities, p. 1953.

PELLAGRA.**State Reports for July, 1919.**

Place.	New cases reported.	Place.	New cases reported.
Florida:		Maryland:	
Duval County.....	1	Allegany County—	
Escambia County.....	1	Cumberland.....	1
Gadsden County.....	1	Wicomico County—	
Leon County.....	1	Bivalve.....	1
Manatee County.....	1	Total.....	2
Orange County.....	1		
Polk County.....	1	West Virginia:	
St. Johns County.....	1	Logan County.....	1
Walton County.....	1	Mingo County.....	2
Total.....	9	Total.....	3

PELLAGRA—Continued.

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.		2	Memphis, Tenn.	1	
Austin, Tex.		1	Montgomery, Ala.	2	
Charlotte, N. C.		2	Nashville, Tenn.	1	1
Chicago, Ill.		1	New Orleans, La.	1	2
Dallas, Tex.	3	1	Oklahoma City, Okla.		1
Durham, N. C.	4		San Angelo, Tex.		1
Fort Worth, Tex.		1	Savannah, Ga.		1
Lexington, Ky.		1	Tuscaloosa, Ala.	2	
Little Rock, Ark.		1	Waco, Tex.	2	2
Los Angeles, Calif.		1			

PLAGUE-INFECTED GROUND SQUIRRELS.

Alameda and Contra Costa Counties, Calif.

During the period from July 17 to July 28, 1919, 10 plague-infected ground squirrels were reported found in Alameda County and two in Contra Costa County, Calif. In each case diagnosis was based on animal inoculation and cultures. Intensive hunting and poisoning operations are being carried on.

PNEUMONIA.

City Reports for Week Ended Aug. 2, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
Atlanta, Ga.	1	3			Ludington, Mich.		1		
Baltimore, Md.	2	3			Lynn, Mass.	1	1		
Baton Rouge, La.			1	1	Macon, Ga.				1
Birmingham, Ala.		1			Missoula, Mont.		1		
Boston, Mass.	6	3			Mount Vernon, N. Y.		1		
Bristol, Conn.	1				Nashville, Tenn.		2		
Buffalo, N. Y.		3			Newark, N. J.	26	1		
Cambridge, Mass.	1				New Haven, Conn.				1
Charleston, S. C.				2	New Orleans, La.		6		
Charlotte, N. C.		1			New York, N. Y.	38	3	80	
Chelsea, Mass.	1	1			Oakland, Calif.		1		
Chicago, Ill.			62	21	Oklahoma City, Okla.				1
Cincinnati, Ohio.		2			Omaha, Neb.				2
Cleveland, Ohio.	6	8			Orange, N. J.		1		
Council Bluffs, Iowa.	1	1			Paterson, N. J.			1	
Decatur, Ill.		1			Philadelphia, Pa.	19	1		
Denver, Colo.		1		3	Pittsburgh, Pa.				
Detroit, Mich.		1		11	Pittsfield, Mass.	1			
East Chicago, Ind.		1			Portsmouth, Va.		1		
East Orange, N. J.	1				Quincy, Ill.		1		
Everett, Mass.	1	1			Quincy, Mass.		1		
Fort Worth, Tex.		3			Richmond, Va.	1	1		
Grand Rapids, Mich.	1				Riverside, Calif.				1
Green Bay, Wis.		1			Sacramento, Calif.		1		
Greenwich, Conn.		1			San Diego, Calif.		1		
Hancock, Mich.	1	1			San Francisco, Calif.	2	1		
Haverhill, Mass.	3				Santa Barbara, Calif.				1
Hoboken, N. J.		2			Saratoga Springs, N. Y.		1		
Holyoke, Mass.	1				Savannah, Ga.		2		
Indianapolis, Ind.				3	Schenectady, N. Y.		1		
Jersey City, N. J.		3			Somerville, Mass.		1		
Kalamazoo, Mich.	2				Stockton, Calif.		1		
Kansas City, Kans.	1				Trenton, N. J.		1		
Lackawanna, N. Y.	2				Washington, D. C.		6		
La Crosse, Wis.		2			West Hoboken, N. J.		1		
Lawrence, Mass.	1	3			West New York, N. J.				2
Lexington, Ky.		1			Wilmington, Del.		2		
Long Branch, N. J.	1				Worcester, Mass.		1		
Los Angeles, Calif.	3	1		7					
Louisville, Ky.		2							

POLIOMYELITIS (INFANTILE PARALYSIS).**State Reports for June and July, 1919.**

Place.	New cases reported.	Place.	New cases reported.
Florida (July):		West Virginia (July)—Continued.	
Gadsden County.....	1	McDowell County.....	1
Maryland (July):		Mineral County.....	2
Baltimore.....	9	Total.....	11
Allegany County—			
Flintstone.....	1	Wisconsin (July):	
Total.....	10	Calumet County.....	1
Massachusetts (July):		Dodge County.....	1
Essex County—		Fond du Lac County.....	1
West Newbury (town).....	1	Green Lake County.....	1
Middlesex County—		Iowa County.....	4
Lowell.....	1	Juneau County.....	1
Plymouth County—		Kenosha County.....	1
Bridgewater (town).....	2	Marquette County.....	1
Scituate (town).....	1	Marquette County.....	1
Total.....	5	Milwaukee County.....	52
Minnesota (June):		Racine County.....	7
Hubbard County—		Richland County.....	1
Nevis.....	1	Rock County.....	1
West Virginia (July):		Sheboygan County.....	1
Fayette County.....	2	Walworth County.....	1
Kanawha County.....	6	Washington County.....	1
		Waukesha County.....	3
		Wood County.....	1
		Total.....	80

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	2	.....	Milwaukee, Wis.....	13	2
Birmingham, Ala.....	3	.....	New York, N. Y.....	.....	1
Chicago, Ill.....	10	.....	Omaha, Nebr.....	4	.....
East St. Louis, Ill.....	1	1	Parkersburg, W. Va.....	1	.....
Flint, Mich.....	1	.....	Pontiac, Mich.....	6	4
Fort Worth, Tex.....	.....	2	Racine, Wis.....	2	.....
Grand Rapids, Mich.....	1	.....	Richmond, Va.....	1	.....

RABIES IN ANIMALS.**City Reports for Week Ended Aug. 2, 1919.**

Place.	Cases.	Place.	Cases.
Akron, Ohio.....	1	Greenwich, Conn.....	1
Cincinnati, Ohio.....	1	Louisville, Ky.....	1
Columbus, Ohio.....	1	Middletown, Ohio.....	1
East St. Louis, Ill.....	1		

SCARLET FEVER.

See Telegraphic weekly reports from States, page 1941; Monthly summaries by States, page 1943; and Weekly reports from cities, page 1953.

SMALLPOX.

State Reports for June and July, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Maryland (July):						
Baltimore.....	1				1	
Allegany County—						
Cumberland.....	1				1	
Queen Annes County—						
Sudlersville.....	1				1	
Somerset County—						
Crisfield.....	2				2	
Total.....	5				5	
Massachusetts (July):						
Norfolk County—						
Quincy.....	2				2	
Minnesota (June):						
Becker County—						
Detroit.....	5				5	
Detroit Township.....	2				2	
Green Valley Township.....	1				1	
Big Stone County—						
Ortonville.....	5				3	2
Brown County—						
Sleepy Eye.....	1				1	
Crow Wing County—						
Crosby.....	1		1			
Dakota County—						
Farmington.....	1				1	
Inver Grove Township.....	1				1	
Dodge County—						
Dodge Center.....	1			1		
Ripley Township.....	1				1	
Faribault County—						
Wanabeago.....	1				1	
Grant County—						
Elbow Lake.....	2				2	
Hennepin County—						
Minneapolis.....	104		2	2	100	
Minnetonka Township.....	2				2	
Houston County—						
Mayville Township.....	2				2	
Spring Grove Township.....	1				1	
Hubbard County—						
Park Rapids.....	5				5	
Kanabec County—						
Ogilvie.....	7				7	
Kanabec Township.....	11				11	
Southfork Township.....	15				15	
Lincoln County—						
Lake Benton Township.....	1					1
Lyon County—						
Tracy.....	4				4	
Mahnomen County—						
Chief Township.....	1				1	
Mower County—						
Austin.....	1				1	
Murray County—						
Chandler.....	3				3	
Olmsted County—						
Rochester.....	1				1	
Otter Tail County—						
Fergus Falls.....	1				1	
Polk County—						
Lowell Township.....	1				1	
Ramsey County—						
St. Paul.....	40				40	
North St. Paul.....	4				4	
New Canada Township.....	8				8	
White Bear Township.....	1				1	
Redwood County—						
Faxon Township.....	1				1	
St. Louis County—						
Duluth.....	29			3	26	

SMALLPOX—Continued.

State Reports for June and July, 1919—Vaccination Histories—Continued.

Place.	Vaccination history of cases.				
	New cases reported.	Deaths.	Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.
Minnesota (June)—Continued.					
Sherburne County—					
Lake Fremont.....	9			2	6
Stearns County—					
St. Cloud.....	1				1
Sauk Center.....	2				2
Todd County—					
Staples.....	2				2
Wabasha County—					
Lake City.....	1				1
West Albany Township..	1				1
Washington County—					
Stillwater.....	6				5
Total.....	287		3	8	271
Wisconsin (July):					
Adams County.....	4		1	1	2
Ashland County.....	1		1		
Barron County.....	2				2
Buffalo County.....	1				1
Calumet County.....	1			1	
Clark County.....	7				6
Columbia County.....	3				3
Dane County.....	2		2		
Douglas County.....	11		1	2	8
Fond du Lac County.....	5				5
Green County.....	3				3
Kenosha County.....	1				1
Marinette County.....	8				8
Marquette County.....	8		1	2	5
Milwaukee County.....	24			1	23
Outagamie County.....	2				2
Portage County.....	3				3
Racine County.....	45		14		1
Richland County.....	1				1
St. Croix County.....	12				11
Shawano County.....	2				2
Taylor County.....	2				2
Vernon County.....	1				1
Waukesha County.....	1				1
Waushara County.....	1				1
Winnebago County.....	11		3		7
Wood County.....	11			3	6
Total.....	143		23	10	67

West Virginia Report for July, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
West Virginia:			West Virginia—Continued.		
Barbour County.....	4		Mercer County.....	1	
Braxton County.....	4		Mineral County.....	1	
Fayette County.....	13		Mingo County.....	3	
Grant County.....	2		Monongalia County.....	14	
Harrison County.....	8		Summers County.....	4	
Kanawha County.....	5		Taylor County.....	3	
Lewis County.....	1		Tyler County.....	6	
Logan County.....	1		Wood County.....	1	
McDowell County.....	8		Total.....	84	
Marion County.....	5				

SMALLPOX—Continued.

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, Wash.	1		Morgantown, W. Va.	1	
Atlanta, Ga.	6		Nashville, Tenn.	1	
Battle Creek, Mich.	3		New Orleans, La.	1	
Beatrice, Nebr.	1		Oakland, Calif.	3	
Bellingham, Wash.	1		Oklahoma City, Okla.	2	
Birmingham, Ala.	1		Omaha, Nebr.	5	
Boise, Idaho.	2		Oshkosh, Wis.	2	
Cleveland, Ohio.	5		Pekin, Ill.	1	
Columbus, Ga.	1		Pontiac, Mich.	2	
Cumberland, Md.	1		Portland, Oreg.	17	
Dallas, Tex.	20		Racine, Wis.	1	
Davenport, Iowa.	1		Roanoke, Va.	1	
Denver, Colo.	18		St. Cloud, Minn.	1	
Detroit, Mich.	7		St. Paul, Minn.	2	
Everett, Wash.	2		Salt Lake City, Utah.	3	
Flint, Mich.	1		San Francisco, Calif.	9	
Fort Worth, Tex.	1		San Jose, Calif.	3	
Galesburg, Ill.	1		Santa Cruz, Calif.	3	
Great Falls, Mont.	2		Seattle, Wash.	4	
Hoquiam, Wash.	3		South Bend, Ind.	1	
Kenosha, Wis.	1		Spartanburg, S. C.	1	
Kokomo, Ind.	1		Spokane, Wash.	3	
Lincoln, Nebr.	3		Stockton, Calif.	2	
Logansport, Ind.	3		Superior, Wis.	4	
Los Angeles, Calif.	1		Tiffin, Ohio.	1	
Marinette, Wis.	6		Walla Walla, Wash.	1	
Milwaukee, Wis.	4		Yakima, Wash.	3	
Minneapolis, Minn.	5	1	Youngstown, Ohio.	6	1

TETANUS.

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Los Angeles, Calif.		1	Savannah, Ga.		1
Lynn, Mass.	1	1	Springfield, Ohio.		1
New York, N. Y.	1	1	Worcester, Mass.	1	2
Rochester, N. Y.		2			

TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 1941; and Weekly reports from cities, p. 1953.

TYPHOID FEVER.

State Reports for June and July, 1919.

Place.	New cases reported.	Place.	New cases reported.
Florida (July):		Florida (July)—Continued.	
Bay County	2	Leon County	1
Broward County	2	Levy County	2
Miami	1	Key West	1
De Soto County	2	Orange County	1
Jacksonville	5	Pasco County	3
Escambia County	11	St. Johns County	1
Gadsden County	1	Suwannee County	1
Hernando County	1	Walton County	3
Tampa	6		
Jackson County	1	Total	48
Jefferson County	1		
Lee County	2		

TYPHOID FEVER—Continued.

State Reports for June and July, 1919—Continued.

Place.	New cases reported.	Place.	New cases reported.
Maryland (July):		Maryland (July)—Continued.	
Baltimore.....	39	Queen Annes County—	
Allegany County—		Centerville.....	1
Cumberland.....	6	Centerville, R. D.....	1
Westernport.....	1	Chester.....	1
Frostburg.....	1	Somerset County—	
Lonaconing.....	3	Princess Anne.....	1
Eckhart.....	1	Pocomoke City, R. D.....	2
Long.....	1	Hopewell, R. D.....	1
Oldtown.....	1	Chance.....	1
Western Md. Hospital (Pa.).....	1	Wenona.....	1
Anne Arundel County—		Marion.....	2
Sudley.....	4	Deals Island.....	1
Baltimore County—		Princess Anne, R. D.....	1
Catonsville.....	2	St. Marys County—	
Texas.....	1	California.....	1
Fullerton.....	1	Valley Lee, R. D.....	1
Woodlawn, R. D.....	1	Pearson.....	1
Owings Mills, R. D.....	1	Mechanicsville, R. D.....	2
Calvert County—		Cedar Point.....	2
Pumpkin.....	1	Talbot County—	
Poplars.....	1	Trappe, R. D.....	1
Sunderland.....	1	St. Michaels.....	1
Willows.....	1	Wye Mills.....	1
Caroline County—		Wye Mills, R. D.....	1
Federalsburg.....	2	Washington County—	
Hobbs.....	1	Big Pool, R. D.....	2
Preston.....	2	Fairplay, R. D.....	2
Carroll County—		Grimes.....	1
Taneytown, R. D.....	1	Bakersville.....	1
Cecil County—		Dargan.....	1
Rowlandsville.....	1	Hagerstown.....	5
North East, R. D.....	1	Indian Spring.....	1
Charles County—		Boonsboro, R. D.....	1
Hughesville.....	1	Wicomico County—	
Hughesville, R. D.....	1	Salisbury.....	1
Faulkner, R. D.....	1	Salisbury, R. D.....	1
Pomfret.....	1	Pensinsula General Hospital	
Bryantown, R. D.....	2	(Del.).....	1
La Plata, R. D.....	4	Quantico, R. D.....	1
Bryantown.....	1	Fruitland, R. D.....	1
Dorchester County—		Delmar, R. D.....	1
Reids Grove.....	1	Eden, R. D.....	2
East New Market.....	2	Total.....	174
East New Market, R. D.....	1		
Cambridge.....	2	Massachusetts (July):	
Eldorado, R. D.....	2	Barnstable County—	
Hooper's Island.....	1	Pennis (town).....	1
Fishing Creek.....	1	Berkshire County—	
Frederick County—		Adams (town).....	1
Burkittsville.....	1	North Adams.....	1
Thurmont, R. D.....	1	Bristol County—	
Hopeland.....	1	Bartmouth (town).....	1
Thurmont.....	1	Fall River.....	9
Jefferson.....	1	Raynham (town).....	1
Garrett County—		Essex County—	
Kitzmiller.....	1	Haverhill.....	3
Swanton, R. D.....	1	Lawrence.....	5
Harford County—		Lynn.....	7
Havre de Grace.....	2	Salem.....	1
Pylesville.....	3	West Newbury (town).....	1
Brynum.....	1	Hampden County—	
Howard County—		Springfield.....	1
Harwood.....	1	Middlesex County—	
Kent County—		Arlington (town).....	1
Golts.....	1	Cambridge.....	2
Montgomery County—		Everett.....	2
Middlebrook.....	1	Malden.....	8
Middlebrook, R. D.....	3	Marlborough.....	1
Rockville, R. D.....	1	Medford.....	2
Germantown.....	1	Newton.....	1
Kensington.....	1	Tewksbury (town).....	1
White Oak.....	1	Wilmington (town).....	1
Prince Georges County—		Winchester (town).....	1
Greater Capitol Heights.....	1	Woburn.....	2
Laurel.....	1	Notfolk County—	
Upper Marlboro.....	3	Quincy.....	2
Mount Rainier.....	1	Walpole (town).....	1
Silver Hill.....	2		

TYPHOID FEVER—Continued.

State Reports for June and July, 1919—Continued.

Place.	New cases reported.	Place.	New cases reported.
Massachusetts—Continued.		West Virginia (July):	
Plymouth County—		Barbour County.....	4
Brockton.....	1	Berkley County.....	8
Suffolk County—		Braxton County.....	1
Boston.....	5	Brooke County.....	2
Chelsea.....	1	Cabell County.....	2
Winthrop (town).....	1	Clay County.....	2
Worcester County—		Doddridge County.....	5
Leominster.....	1	Fayette County.....	4
Royalston (town).....	1	Grant County.....	2
Sutton (town).....	1	Greenbrier County.....	4
Worcester.....	2	Harrison County.....	4
Total.....	70	Jefferson County.....	2
Minnesota (June):		Kanawha County.....	20
Chippewa County—		Lewis County.....	8
Grace Township.....	1	Logan County.....	6
Clay County—		McDowell County.....	12
Barnesville.....	1	Marion County.....	9
Holy Cross Township.....	1	Marshall County.....	1
Crow Wing County—		Mason County.....	4
Crosby.....	1	Mercer County.....	1
Pequot.....	1	Mineral County.....	2
Hennepin County—		Mingo County.....	1
Minneapolis.....	5	Monongalia County.....	4
Isanti County—		Monroe County.....	15
Maple Ridge Township.....	1	Morgan County.....	2
Itasca County—		Ohio County.....	6
Nashwanck.....	2	Pendleton County.....	3
Kandiyohi County—		Pocahontas County.....	1
Willmar.....	1	Preston County.....	4
Lake County—		Putnam County.....	1
Two Harbors.....	1	Raleigh County.....	2
Lincoln County—		Randolph County.....	3
Ivanhoe.....	1	Ritchie County.....	4
McLeod County—		Roane County.....	2
Hutchinson.....	1	Summers County.....	13
Marshall County—		Tucker County.....	5
Warren.....	1	Upshur County.....	1
Murray County—		Wayne County.....	2
Shetek Township.....	1	Webster County.....	3
Nobles County—		Wetzel County.....	1
Willmet.....	1	Wirt County.....	4
Ottertail County—		Wood County.....	2
Fergus Falls Township.....	1	Total.....	182
Ramsey County—		Wisconsin (July):	
St. Paul.....	3	Barron County.....	3
Rice County—		Clark County.....	2
Faribault.....	1	Crawford County.....	1
St. Louis County—		Milwaukee County.....	7
Aurora.....	7	Rusk County.....	3
Duluth.....	2	Winnebago County.....	4
Stearns County—		Total.....	20
St. Cloud.....	2		
Stevens County—			
Hancock.....	1		
Total.....	37		

City Reports for Week Ended Aug. 2, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	2		Cambridge, Mass.....	1	
Alton, Ill.....	1	1	Canton, Ohio.....	1	
Anniston, Ala.....	2		Charleston, S. C.....	1	
Atlanta, Ga.....	3	1	Charleston, W. Va.....		2
Baltimore, Md.....	11	2	Charlotte, N. C.....	3	
Baton Rouge, La.....	1		Chicago, Ill.....	5	
Birmingham, Ala.....	2	3	Chillicothe, Ohio.....	2	
Bloomington, Ind.....		1	Cincinnati, Ohio.....	3	
Boston, Mass.....	3		Cleveland, Ohio.....		1
Buffalo, N. Y.....	3	2	Coffeyville, Kans.....	2	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 2, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Asheville, N. C.	25,656	9							6	2
Ashtabula, Ohio.	22,008	3								1
Atlanta, Ga.	196,144		12				3			4
Atlantic City, N. J.	59,515	15	1		2					1
Attleboro, Mass.	19,776	6								1
Auburn, N. Y.	37,823	6								
Austin, Tex.	35,612	7	1							2
Bakersfield, Calif.	17,543	8								1
Baltimore, Md.	594,637	211	19	3			9		55	12
Baton Rouge, La.	17,544	4								
Battle Creek, Mich.	30,159		2		3		2			
Bayonne, N. J.	72,204		6				2		1	
Beatrice, Nebr.	10,437	5								
Beaumont, Tex.	28,551	9								3
Bedford, Ind.	10,613	2	2							
Bellingham, Wash.	34,362						1			
Beloit, Wis.	18,547	2					2			
Benton Harbor, Mich.	11,099	4								
Berkeley, Calif.	60,427	8	3				1		1	
Berlin, N. H.	13,892	3								
Beverly, Mass.	22,128	8					3		2	1
Biddeford, Me.	17,750	5								
Billings, Mont.	15,123	1							1	
Binghamton, N. Y.	54,864	9	1						2	
Birmingham, Ala.	189,716	72					3		6	11
Bloomington, Ind.	11,661	6							2	1
Boise, Idaho.	35,951	1	1							
Boston, Mass.	767,813	173	32	2	10		8		46	14
Brazil, Ind.	10,472	4								1
Bridgeport, Conn.	124,724		5	1	14		3		7	1
Bristol, Conn.	16,318	1			1					
Brookton, Mass.	69,152	5			5				1	
Brookline, Mass.	33,526	5					1			2
Buffalo, N. Y.	475,781	119	54	3	4		4		25	10
Burlington, Iowa.	25,144	4								1
Burlington, Vt.	21,802	10								1
Cadillac, Mich.	10,158	3	2							
Cairo, Ill.	15,995	5	1							
Cambridge, Mass.	114,293	20	6		6				5	3
Canton, Ohio.	62,566	26			1				2	
Cedar Rapids, Iowa.	38,033		3							
Chanute, Kans.	12,968	2								1
Charleston, S. C.	61,041	9					1		1	1
Charleston, W. Va.	31,060	11			2		1			
Charlotte, N. C.	40,759	14								
Chelsea, Mass.	48,405	14	1				1		3	1
Chicago, Ill.	2,547,201	553	59	5	76	7	25	2	314	53
Chicopee, Mass.	29,950	8		1	1		1			1
Chillicothe, Ohio.	15,625	2								
Cincinnati, Ohio.	414,248	111	10		14		3		24	12
Cleveland, Ohio.	692,259	170	24	3	16		4		21	19
Clinton, Mass.	13,075	3								
Cohoes, N. Y.	25,292	4							1	1
Colorado Springs, Colo.	38,965	13	1	1	2		1		3	6
Columbia, S. C.	35,165								3	
Columbus, Ga.	26,306	10								
Columbus, Ohio.	220,135	58	2				1		4	6
Concord, N. H.	22,838	5								
Council Bluffs, Iowa.	31,838	13	1							
Covington, Ky.	59,623	8	1						2	1
Cranston, R. I.	26,773	6								
Cumberland, Md.	26,636	9	1				1		3	1
Dallas, Tex.	129,738	34	2						20	4
Danbury, Conn.	22,931	6								
Danville, Ill.	32,969		5						1	
Danville, Va.	20,183				1					
Dayton, Ohio.	128,939	39	5		3				3	
Decatur, Ill.	41,483	8	4	1						1
Dedham, Mass.	10,618	1								
Denver, Colo.	268,439	55	19		3					9
Des Moines, Iowa.	104,052	1					1			

¹ Population April 15, 1910.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 2, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Detroit, Mich.	619,648	195	35	1	26	1	25		8	20
Dover, N. H.	13,276	2								
Dubuque, Iowa	40,096		3							
Duluth, Minn.	97,077	15			2				3	2
Durham, N. C.	26,160	7	1							1
East Chicago, Ill.	30,286	4								
East Cleveland, Ohio	13,864						1			
Easthampton, Mass.	10,656						1		1	
East Orange, N. J.	43,761	7	5				1		2	1
East St. Louis, Ill.	77,312	17			1		1		3	
Eau Claire, Wis.	18,887				1					
Elgin, Ill.	28,362	2								
Elizabeth, N. J.	88,830		4		2		2		2	4
Elmira, N. Y.	38,272	13					1		3	
El Paso, Tex.	69,149	31					1			9
Englewood, N. J.	12,603	1					1			
Evanston, Ill.	29,304									1
Everett, Mass.	40,160	9	1		1		1		1	1
Everett, Wash.	37,205						1			
Fairmount, W. Va.	16,111				1					
Fall River, Mass.	129,828	33	1		4	1	1		4	2
Findlay, Ohio	14,858	5								
Fitchburg, Mass.	42,419	3					1		1	1
Flint, Mich.	57,396	14	1	1	2		1			
Fond du Lac, Wis.	21,485	4								1
Fort Scott, Kans.	10,564	3								
Fort Wayne, Ind.	78,914	10	1				1		3	1
Fort Worth, Tex.	103,597	51	4	1					4	4
Fostoria, Ohio	10,959	2								
Freeport, Ill.	19,844	3								
Fremont, Nebr.	10,080	2								
Fremont, Ohio	11,054				2					
Fresno, Calif.	36,314	9	2	1						1
Galesburg, Ill.	24,629	5								
Gloucester City, N. J.	11,375								1	
Grand Rapids, Mich.	132,861	18			1		3			
Great Falls, Mont.	13,948	8	1							2
Green Bay, Wis.	30,017	8								
Greenfield, Mass.	12,251	5								1
Greensboro, N. C.	20,171	11								2
Greenwich, Conn.	19,594	1			1					
Hackensack, N. J.	17,412	7	1						2	
Hammond, Ind.	27,016	9								
Hancock, Mich.	12,578	2							1	1
Haverhill, Mass.	49,180	1	1		3					
Hibbing, Minn.	17,550		3		2				1	
Highland Park, Mich.	33,859	6								
Hoboken, N. J.	78,324	7							3	
Holland, Mich.	12,459	1								
Holyoke, Mass.	66,503	14								2
Hoquiam, Wash.	12,230						1			
Hudson, N. Y.	12,898	2								
Indianapolis, Ind.	283,622	85	2	2	7		1		7	12
Ironton, Ohio	14,079	4								
Ironwood, Mich.	15,095	4							1	1
Irrington, N. J.	16,710				1					
Ithaca, N. Y.	16,017	3								
Jamestown, N. Y.	37,431	7	3		3					1
Janesville, Wis.	14,411	4								
Jersey City, N. J.	312,557		18	1	2		3		12	8
Johnstown, N. Y.	10,678	2								
Joplin, Mo.	33,400	4								
Kalamazoo, Mich.	50,408	19	3	1	3		4		2	1
Kansas City, Kans.	102,096		2		1				4	
Kearny, N. J.	24,325	6					2		1	
Kenosha, Wis.	32,833	11	1		2		6			
Kokomo, Ind.	21,929	8								
Lackawanna, N. Y.	16,219	5	5						1	
La Crosse, Wis.	31,833	9			1				1	2
La Fayette, Ind.	21,481	11								
Lancaster, Ohio	16,086	6								1

* Population April 15, 1910.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 2, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Lawrence, Kans.	13,477	2								
Lawrence, Mass.	102,923	23	1				2		5	1
Leavenworth, Kans.	19,363									1
Leominster, Mass.	21,365				2				2	
Lexington, Ky.	41,997	27			1		1		10	3
Lima, Ohio.	37,145	7	1		2					1
Lincoln, Nebr.	46,957	8			1					
Little Rock, Ark.	58,716	10							7	3
Logansport, Ind.	21,338	5					2			
Long Beach, Calif.	29,163	12			3					
Long Branch, N. J.	15,733	4					1		1	2
Lorain, Ohio.	38,266	8	2		1		1		1	3
Los Angeles, Calif.	535,485	104	31		3				46	21
Louisville, Ky.	240,808	75	3						12	7
Lowell, Mass.	114,366	27	2	1	1				10	
Ludington, Mich.	10,566	7					1			
Lynchburg, Va.	33,497	4								
Lynn, Mass.	104,534	19	2		1		2		3	1
Macon, Ga.	46,099	17							1	1
Madison, Wis.	31,315	6								1
Manchester, N. H.	79,607	15	1						6	
Manitowoc, Wis.	13,931	5					2			
Mankato, Minn.	10,365	6			1		1			
Marinette, Wis.	14,610	2								
Marion, Ind.	19,923	4	1							
Marion, Ohio.	24,129				1					
Marlboro, Mass.	15,285	3								
Mason City, Iowa.	14,938	3								
Medford, Mass.	26,681	5					4		1	1
Melrose, Mass.	17,724	3			1					
Memphis, Tenn.	151,877	3	7				3		7	2
Methuen, Mass.	14,320	2							1	
Middletown, Ohio.	16,384	3								1
Millford, Mass.	14,280	5								1
Milwaukee, Wis.	445,008	95	9	1	6		8	2	20	10
Minneapolis, Minn.	373,448	72	21	1	4		4		15	6
Missoula, Mont.	19,075	7					1			
Mobile, Ala.	59,201	26					1			3
Montclair, N. J.	27,087								3	
Montgomery, Ala.	44,039	14					2		1	
Morristown, N. J.	13,410	1								
Moundsville, W. Va.	11,513	2	1							
Mount Vernon, N. Y.	37,991	6								
Nashua, N. H.	27,541	12								
Nashville, Tenn.	118,136	52			1		3		4	4
Newark, N. J.	418,789	97	20	2	1		5		51	11
New Bedford, Mass.	121,622	26			5				5	2
New Britain, Conn.	55,385	19	2				2		8	
New Brunswick, N. J.	25,855		1						3	
Newburgh, N. Y.	29,893	8	1				1			
Newburyport, Mass.	15,291	2								
New Haven, Conn.	152,275	33					2		6	1
New Orleans, La.	377,010	126	8	1	2				22	20
Newport, R. I.	30,585	4	2							
Newton, Mass.	44,345	12	1							
New York, N. Y.	5,737,492	1,198	132	12	58	3	19	2	312	115
Niagara Falls, N. Y.	38,466	12	3		12		3			1
Norfolk, Va.	91,148	1								
North Adams, Mass.	22,019	4			1					
Northampton, Mass.	20,006	10			1					
North Attleboro, Mass.	11,248	1								
North Tonawanda, N. Y.	14,060	4							1	
Norwalk, Conn.	27,332				1					
Norwich, Conn.	21,923		1							
Norwood, Ohio.	23,269	2								
Oakland, Cal.	206,405	46	2	1			1		2	6
Oak Park, Ill.	27,816	9					1			
Ogdensburg, N. Y.	16,845	4								
Oklahoma City, Okla.	97,588	17	2				2		2	
Olean, N. Y.	16,927	7								

¹ Population Apr. 15, 1910.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 2, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Omaha, Nebr.	177,777	34		1	1		1			2
Orange, N. J.	33,636	8							1	1
Oshkosh, Wis.	36,549	7	1		1				2	1
Parkersburg, W. Va.	21,059	12							1	1
Pasadena, Cal.	49,620	10							4	1
Passaic, N. J.	74,478	12	8	1	3				2	1
Pateron, N. J.	140,512		6		2		1		18	
Peekskill, N. Y.	19,034	1								1
Peoria, Ill.	72,181	20	1				2			
Perth Amboy, N. J.	42,646	6								
Petersburg, Va.	25,817		1						2	
Philadelphia, Pa.	1,735,514	429	54	3	28	1	13		60	68
Phillipsburg, N. J.	15,879	2								
Pine Bluff, Ark.	17,777		1						1	
Piqua, Ohio.	14,275	2	1						3	1
Pittsburgh, Pa.	588,193	128	14	1	7		3		27	7
Pittsfield, Mass.	39,678	10								
Plainfield, N. J.	24,330	9								
Plattsburg, N. Y.	13,111	2								
Plymouth, Mass.	14,001	1								
Pomona, Calif.	13,624	3	4	1					1	1
Pontiac, Mich.	18,006	14	5		2				1	
Portland, Me.	64,720	19	3		1		3			
Portland, Oreg.	308,399	45	2		1		6		6	6
Portsmouth, Va.	40,693	18								
Poughkeepsie, N. Y.	30,786	10							2	
Providence, R. I.	259,805	49	4	1	1		5			5
Quincy, Ill.	36,832	10					1			
Quincy, Mass.	39,022	11					1		2	1
Racine, Wis.	47,465	11					1			
Rahway, N. J.	10,361	1							1	
Redlands, Calif.	14,573	1								1
Reno, Nev.	15,514	4								
Richmond, Va.	158,702	35	9		2	1	2		6	2
Riverside, Calif.	20,496	3								
Roanoke, Va.	46,282	10	3				1		2	
Rochester, N. Y.	264,714	50	7	1			6		10	
Rockford, Ill.	56,739	16	1				1			2
Rock Island, Ill.	29,452	4								
Rocky Mount, N. C.	12,673	10	2						1	1
Rome, Ga.	15,607	3								
Rome, N. Y.	24,250		2		1				1	
Rutland, Vt.	15,038	3								1
Sacramento, Calif.	68,984	14	1	1	1		1		2	1
Saginaw, Mich.	56,460	17								
St. Cloud, Minn.	12,013				1					
St. Joseph, Mo.	86,498	24	1				1			
St. Louis, Mo.	768,630	198	42	4	15	2	6		26	15
St. Paul, Minn.	252,465	42	20	2	5				9	2
Salem, Mass.	49,346	7	2		1				3	1
Salt Lake City, Utah.	121,623	18					1			1
San Angelo, Tex.	10,321	6								2
San Bernardino, Calif.	17,616	4								3
San Diego, Calif.	56,412	20	2							1
Sandusky, Ohio.	20,226	8								
Sanford, Me.	11,217	2							1	
San Francisco, Calif.	471,023	142	10		2		4		24	11
Santa Barbara, Calif.	15,360	5								
Santa Cruz, Calif.	15,150	9								1
Saratoga Springs, N. Y.	13,839	5							6	
Saugus, Mass.	10,210	2	1		1					1
Sault Ste. Marie, Mich.	14,130	4								
Savannah, Ga.	69,250	34	2						5	5
Schenectady, N. Y.	103,774	14	1		6		1		3	2
Seattle, Wash.	366,445		3		2		4			
Somerville, Mass.	88,618	12	2						5	4
South Bend, Ind.	70,967	15	2							
Southbridge, Mass.	14,465	1								
Spokane, S. C.	21,985	5								1
Spokane, Wash.	157,656		3		3		7			

* Population Apr. 15, 1910.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Aug. 2, 1919—Continued.

City.	Popula- tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Springfield, Ill.	62,623	14					1		1	
Springfield, Mass.	108,668	38	2				1		5	5
Springfield, Mo.	41,169	13								1
Springfield, Ohio.	52,296	19	1		1					1
Stamford, Conn.	31,810						1			
Steubenville, Ohio.	28,259	7					2			
Stockton, Calif.	36,209	12	1							
Superior, Wis.	47,167	10			3		2			1
Syracuse, N. Y.	158,559	28	1						1	
Tacoma, Wash.	117,446		4				2			
Taunton, Mass.	36,610	10			1				2	1
Terre Haute, Ind.	67,361	15								
Tiffin, Ohio.	12,962	1			4				1	
Toledo, Ohio.	202,010	55	4	1	52		8		4	6
Topeka, Kans.	49,538	15					1		1	1
Trenton, N. J.	113,974	35	2		9				5	2
Troy, N. Y.	78,094	19	1						7	
Tulsa, Okla.	32,507						1			
Tuscaloosa, Ala.	10,824	3	1						1	
Vallejo, Calif.	13,803	2								
Virginia, Minn.	15,954	1			1					
Waco, Tex.	34,015	11	3	1			1			
Wakefield, Mass.	12,947	1					1			
Washington, D. C.	369,282	130	6				1		29	29
Waterbury, Conn.	89,201						1		4	
Watertown, Mass.	15,188	4								
Watertown, N. Y.	30,404		2							
Wausau, Wis.	19,666								1	
Webster, Mass.	13,484	2								
Westfield, Mass.	18,769	7								2
West Hoboken, N. J.	44,386	3								
West New York, N. J.	19,613	3							2	
West Orange, N. J.	13,964	1	1		1					
Wheeling, W. Va.	43,657	11							2	1
White Plains, N. Y.	23,331	5					2			
Wichita, Kans.	73,597	17	1						1	1
Wilmington, Del.	95,369	24	1		2					
Wilmington, N. C.	30,400	7							1	2
Winchester, Mass.	10,812	1								
Winston-Salem, N. C.	33,136	15	1						1	1
Winthrop, Mass.	13,105						2			
Woburn, Mass.	16,076	2								
Worcester, Mass.	166,106	50	2		2		3		9	5
Yakima, Wash.	22,058						2			
Yonkers, N. Y.	103,066	19	4				1		18	
Youngstown, Ohio.	112,282	22							4	
Zanesville, Ohio.	31,320	8								2

FOREIGN.

BRAZIL.

Yellow Fever—Bahia—January–July 15, 1919.

From January 1 to July 15, 1919, 103 cases of yellow fever were notified at Bahia, Brazil. The cases were distributed according to months as follows: January, 2 cases; February, 1 case; March, 11 cases; April, 15 cases; May, 31 cases; June, 36 cases; and from July 1 to 15, 7 cases.

CANAL ZONE.

Yellow Fever at Quarantine.

A fatal case of yellow fever at quarantine, Canal Zone, Panama, was reported August 16, 1919. The patient was stated to have embarked at Corinto, August 6, on a vessel which arrived at quarantine, Canal Zone, August 10, 1919. The case terminated fatally August 12, 1919.

GREECE.

Influenza—Athens.

Influenza was reported present at Athens from May 14 to June 14, 1919, with 25 fatal cases. (Population, estimated, 252,000.)

MADAGASCAR.

Further Relative to Influenza.¹

On June 2, 1919, epidemic influenza was reported to have spread to practically all sections of Madagascar except Majunga and a few other towns on the west coast. Influenza was first reported in the island about the middle of April, with 500 cases at Diego Suarez, and at Tananarive from April 29 to May 11, with 75 fatal cases.

MALTA.

Influenza—Pneumonia—April, 1919.

During the month of April, 1919, 1,135 new cases of influenza with 62 fatalities were reported in the Island of Malta. During the same period there were reported 13 cases of pneumonia and 61 of broncho-pneumonia. (Population, estimated, 224,655.)

MANCHURIA.

Cholera—Dairen—Harbin.

Cholera was reported present at Dairen, August 12, 1919, and in Harbin and surrounding districts August 7, 1919. On August 14, 1919, cholera was reported to be epidemic at Harbin, with an estimated number of deaths to date of from 150 to 200, occurring for the most part among Chinese.

¹ Public Health Reports, Aug. 1, 1919, p. 1734.

August 22, 1919.

1960

MAURITIUS.

Influenza.

Influenza was reported present, June 2, 1919, on the Island of Mauritius.

SPAIN.

Influenza—Malaga.

During the month of June, 1919, 25 fatal cases of influenza were reported at Malaga. (Population, estimated, 142,000.) During the same period fatalities from influenza were reported as occurring in the Province of Malaga.

STRAITS SETTLEMENTS.

Influenza—Singapore.

Influenza was reported present at Singapore during the month of May, 1919.

UNION OF SOUTH AFRICA.

Influenza—Durban.

During the month of May, 1919, 17 fatal cases of influenza were reported at Durban, Union of South Africa. Of these cases, 7 occurred in Europeans, 6 in natives, and 4 in Asiatics. (Population, 90,250—European, 40,500; colored, 3,600; native, 26,000; Hindu, 20,150.)

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Aug. 22, 1919.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	June 17-23.....		3	Chinese report.
Chosen (Korea):.....	Aug. 15.....	3		
India:				
Bombay.....	June 8-14.....	15	5	
Calcutta.....	June 15-21.....		60	
Madras.....				Jan. 19-25, 1919: Cases, 113; deaths, 75.
Rangoon.....	June 8-14.....	6	5	
Java:				
East Java.....				May 27-June 3, 1919: Cases, 23; deaths, 17.
Surabaya.....	May 27-June 3.....	2	2	
Manchuria:				
Dairen.....	Aug. 12.....			Present.
Harbin.....	Aug. 7.....			Present, and in surrounding districts. Aug. 14, 1919: Epidemic; Estimated number of deaths 150 to 200.

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Aug. 22, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy.....	June 17-23.....		1	
Egypt.....				Jan. 1-July 9, 1919: Cases, 691; deaths, 331.
Cities—				
Port Said.....	July 4-9.....	2	3	
Provinces—				
Assiout.....	July 3-5.....	3	1	
Fayoum.....	July 5.....	1		
Girgeh.....	July 5-8.....	7	6	
Minieh.....	July 5-7.....	3	1	
Hawaii:				
Ah Poi Camp.....	Aug. 9.....	1	1	
India.....				June 8-14, 1919: Cases, 359; deaths, 274.
Bombay.....	June 8-14.....	7	7	
Calcutta.....	June 15-21.....		5	
Madras.....				Jan. 19-25, 1919: Cases, 2; deaths, 1.
Madras Presidency.....				Jan. 19-25, 1919: Cases, 586; deaths, 347.
Rangoon.....	June 8-14.....	5	5	
Java:				
East Java.....				May 27-June 3, 1919: Cases, 18; deaths, 18.
Surabaya.....	May 27-June 3.....	1	1	

SMALLPOX.

Algeria:				
Algiers.....	June 1-30.....	4	1	
Brazil:				
Rio de Janeiro.....	May 11-June 21.....	61	20	
Canada:				
Nova Scotia—				
Bridgenorth.....	July 27-Aug. 2.....			A few cases; mild.
Halifax.....	do.....	12		Present in Antigonish and Colchester Counties and on Cape Breton Island.
China:				
Amoy.....	June 17-23.....			Present.
Foochow.....	June 1-14.....			Do.
Cuba:				
Habana.....	Aug. 2.....	1		From s. s. Venezia from Spanish ports, arrived about July 20, 1919.
Egypt:				
Alexandria.....	June 25-July 8.....	98	40	
Calro.....	Mar. 5-11.....	23	8	
Great Britain:				
Cardiff.....	July 13-19.....	3		
Liverpool.....	June 22-July 5.....	5		
India:				
Bombay.....	June 8-14.....	35	24	
Calcutta.....	June 15-21.....		44	
Madras.....				Jan. 19-25, 1919: Cases, 29; deaths, 25.
Rangoon.....	June 8-14.....	11	9	
Java:				
East Java.....				
Surabaya.....	May 27-June 3.....	2		May 27-June 3, 1919: Cases, 2.
Italy:				
Messina.....	June 6-28.....	65	22	
Do.....	June 29-July 5.....	32	7	
Naples.....	June 23-29.....	7	12	
Do.....	June 30-July 20.....	15	22	
Turin.....	July 6-13.....	1		
Mexico:				
Cananea.....	Feb. 1-28.....		7	State of Sonora.
Do.....	Apr. 1-30.....		1	
Mexico City.....	Aug. 2-8.....	1		
Newfoundland.....				July 26-Aug. 8, 1919: At out-ports, cases, 10.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Aug. 22, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Oporto.....	June 8-28.....	8	4	
Do.....	June 29-July 12....	13	11	
Spain:				
Seville.....	May 1-31.....		1	
Valencia.....	June 17-29.....	59	3	Present in district.
Vigo.....	June 22-July 12....			Present in surrounding country.
Straits Settlements:				
Singapore.....	May 11-17.....	2	1	
Tunis:				
Tunis.....	June 29-July 5....	3	2	

TYPHUS FEVER.

Algeria:				
Algiers.....	June 1-30.....	6	3	
Brazil:				
Rio de Janeiro.....	May 4-June 21....	3		Mar. 30-Apr. 5, 1919: Cases, 2.
Colombia:				
Barranquilla.....	July 12-19.....		1	
Egypt:				
Alexandria.....	June 28-July 5....	262	88	Jan. 20-Feb. 11, 1919: Cases, 3; deaths, 14.
Cairo.....	Mar. 5-11.....	90	49	Jan. 29-Feb. 11, 1919: Cases, 3; deaths, 1.
Port Said.....				
Germany.....	Apr. 13-26.....	62		55 cases among German troops and 7 among prisoners of war.
Do.....	Apr. 27-May 17....	126		Of these, 90 among Polish workmen and Russians; during same period, 105 cases among German troops and prisoners of war. In addition, Apr. 1-26, 41 cases were notified among Polish workmen and refugees.
Italy.....				June 9-15, 1919: Present in 14 Provinces with 761 cases, viz, Austrian prisoners, 631; Italian soldiers, 23; Roumanian soldiers, 97; civil population, 10.
Do.....				June 16-22, 1919: Present in 12 Provinces, with 127 cases, viz, Austrian prisoners, 102; Italian soldiers, 8; civil population, 12; Roumanian soldiers, 5.
Do.....				June 23-29, 1919: Present in 14 Provinces, with 117 cases, viz, Austrian prisoners, 107; Italian soldiers, 3; civil population, 7.
Naples.....	June 23-29.....	7	1	
Do.....	June 30-July 20....	10	9	
Venice.....	June 30-July 6....	6		
Mexico:				
Mexico City.....	July 13-19.....	18		
San Luis Potosi.....	July 27-Aug. 2....			Present. Also in surrounding country.
Portugal:				
Oporto.....	June 8-28.....	34	9	
Do.....	June 30-July 19....	62	17	
Russia:				
Archangel.....	May 15-June 1....	9	2	

YELLOW FEVER.

Canal Zone.....	Aug. 10-12.....	1	1	At quarantine.
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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to Aug. 15, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Apr. 20-26.....	10		
China:				
Canton.....	June 8-21.....	10	3	
Do.....	Aug. 8.....			Present in foreign section, Island of Sha-mien.
Foochow.....	July 3.....			Present.
Swatow.....	June 2-21.....		118	
India:				
Bombay.....	Apr. 28-June 7.....	29	25	
Calcutta.....	May 4-June 14.....		557	
Madras.....	May 18-24.....	10	8	
Rangoon.....	Apr. 28-June 7.....	73	53	
Indo-China:				
Cochin-China—				
Saigon.....	Apr. 21-June 22.....	330	232	City and district.
Japan:				
Pescadores Islands.....	July 14.....	40		In one village.
Taiwan Island—				
Keelung.....	Aug. 8.....			Present in vicinity.
Taihoku.....	do.....			Present.
Java:				
East Java.....				Apr. 2-May 20, 1919: Cases, 553; deaths, 459.
Surabaya.....	Apr. 23-May 20.....	83	66	
Mid-Java.....				Mar. 28-Apr. 24, 1919: Cases, 1,505; deaths, 1,325.
Samarang.....	Mar. 28-Apr. 24.....	75	74	
West Java.....				May 2-June 9, 1919: Cases, 70; deaths, 43.
Batavia.....	May 2-June 5.....	12	5	
Persia:				
Ardebil.....	May 2.....			Present.
Enzeli.....	Apr. 23.....	1		
Khorram-Ahab.....	May 3.....			Outbreak.
Mianedje.....	Apr. 28.....			Do.
Zindjan.....	Apr. 21-May 4.....		49	
Philippine Islands:				
Manila.....	Apr. 26-May 31.....	7	2	
Provinces.....				May 4-24, 1919: Cases, 567; deaths, 383.
Batangas.....	May 4-24.....	25	23	
Bulacan.....	do.....	48	25	
Cebu.....	do.....	162	84	
Laguna.....	do.....	20	15	
Mindoro.....	do.....	19	14	
Misamis.....	do.....	9	2	
Pampanga.....	do.....	166	131	
Tayabas.....	do.....	118	89	
Provinces.....				June 1-28, 1919: Cases, 615; deaths, 435.
Batangas.....	June 1-28.....	79	61	
Bohol.....	June 15-28.....	11	8	
Bulacan.....	June 1-28.....	63	27	
Cavite.....	June 8-28.....	23	14	
Cebu.....	June 22-28.....	24	11	
Laguna.....	June 8-21.....	16	13	
Ilocos Sur.....	June 15-21.....	1		
Nueva Ecija.....	June 1-28.....	60	30	
Pampanga.....	do.....	105	79	
Pangasinan.....	June 8-28.....	113	81	
Tayabas.....	do.....	108	81	
Union.....	June 22-28.....	7	7	
Siam:				
Bangkok.....	Apr. 13-May 17.....		693	

PLAGUE.

China:				
Canton.....	May 25-June 28.....			Present. Apr. 27-May 10, 1919: Cases, 3; present May 24-June 7, 1919.
Foochow.....	May 18-24.....			Do.
Hongkong.....	June 15-28.....	60	43	
Ecuador:				
Guayaquil.....	June 16-30.....	2	1	
Posorja.....	June 1-30.....	3	1	Bathing place 65 kilometers from Guayaquil.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to Aug. 15, 1919—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt.....				Jan. 1-June 25, 1919: Cases, 638; deaths, 330.
Cities—				
Cairo.....	May 15.....		1	
Kantarah.....	June 19-20.....	4	2	
Port Said.....	May 1-4.....	1	2	Two European. Septicemic.
Suez.....	June 5-11.....	3	3	
Provinces—				
Assiout.....	May 17-June 24.....	80	41	
Beni-Souef.....	May 19-June 21.....	6	5	
Fayoum.....	May 18-June 21.....	8	7	
Girgeh.....	May 15-June 25.....	3	4	
Menoufia.....	June 8-24.....	5	1	
Minieh.....	May 24-June 25.....	29	11	
Great Britain:				
Liverpool.....	July 30.....	1	1	In dock laborer.
Hawaii:				
Paauihau.....	July 19.....	1		
India.....				Apr. 27-June 7, 1919: Cases, 7,907; deaths, 6,232.
Bombay.....	Apr. 28-June 7.....	259	182	
Calcutta.....	May 18-June 14.....		33	
Karachi.....	May 18-June 21.....	144	131	
Rangoon.....	Apr. 28-June 7.....	40	35	
Indo-China:				
Cochin China—				
Saigon.....	Apr. 21-June 22.....	26	18	City and district.
Japan:				
Yokohama.....	June 9-15.....	1	1	
Java:				
East Java.....				Apr. 8-May 20, 1919: Cases, 77; deaths, 77.
Surabaya.....	Apr. 23-May 20.....	6	6	
Mesopotamia:				
Bagdad.....	Apr. 19-June 6.....	317	246	
Basra.....	May 3-10.....	108	89	Including suburb of Ashar. Total from date of outbreak to May 19, 1919, 288 cases.
Siam:				
Bangkok.....	Apr. 27-May 17.....	2	2	
Straits Settlements:				
Singapore.....	Apr. 13-26.....	2	1	
On vessel:				
S. S. City of Sparta.....	Apr. 19-21.....	1	1	From Bombay Apr. 3, 1919: Case, a soldier; at sea.
Do.....	May 12-17.....	1	1	At Liverpool: Case, a native member of the crew. (Public Health Reports, June 27, 1919, p. 1463.)

SMALLPOX.

Arabia:				
Aden.....	May 13-19.....		1	
Austria:				Mar. 9-Apr. 5, 1919: Cases, 92.
Salzburg.....	Mar. 9-Apr. 5.....	50		
Vienna.....	do.....	17		
Azores:				
St. Michaels.....	June 7-20.....	1		
Brazil:				
Bahia.....	Apr. 20-June 7.....	4		Jan. 1-May 3, 1919: Cases, 10.
Pernambuco.....	May 4-25.....	5		
Canada:				
British Columbia—				
Vancouver.....	June 15-July 5.....	4		
New Brunswick—				
Campbellton.....	June 15-21.....	1		
Moncton.....	July 6-12.....	1		
St. John.....	July 27-Aug. 2.....	1		
Nova Scotia—				
Cities—				
Halifax.....	June 15-July 26.....	111		
Sydney.....	June 8-21.....	3		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to Aug. 15, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Nova Scotia—Continued.				
Counties—				
Antigonish.....	June 28.....			Present.
Cumberland.....	do.....			Do.
Guysborough.....	do.....			Do.
Halifax.....	do.....			Do.
Hants.....	do.....			Do.
Lunenburg.....	do.....			Do.
Pictou.....	July 20-24.....			Present. Also on Cape Breton Island.
Ontario—				
Province.....				May 1-June 30, 1919: Cases, 166; deaths, 4.
Hamilton.....	June 29-Aug. 2.....	2		Township in Kent County.
Harwich.....	May 1-31.....	14	2	
Ottawa.....	June 15-July 5.....	4		
Peterborough.....	June 15-21.....	4		
Walpole Island.....	May 1-31.....	42		Kent County. Island in Lake St. Clair. Among Indians.
Prince Edward Island—				
Charlottetown.....	July 16-19.....	6		
Quebec—				
Montreal.....	June 8-28.....	18		June 8-14, 1919: 10 cases on incoming vessels.
Quebec.....	June 29-July 19.....	8		Estimated. On Indian reserve.
Restigouche.....	June 15-July 31.....	40		
Ceylon:				
Colombo.....	May 1-31.....	4		
China:				
Amoy.....	May 20-June 16.....		13	Present.
Canton.....	May 18-June 21.....			Do.
Chefoo.....	June 8-21.....			Do.
Chungking.....	May 4-June 28.....			Do.
Foochow.....	May 18-July 5.....			Do.
Hongkong.....	May 18-June 7.....	4	4	Do.
Nanking.....	May 25-June 28.....			Do.
Chosen (Korea):				
Chemulpo.....	Apr. 1-May 31.....	19	4	
Fusan.....	do.....	294	81	
Seoul.....	do.....	3	1	
Czecho-Slovakia:				
Prague.....	May 18-June 21.....	11	2	
Egypt:				
Alexandria.....	May 14-June 24.....	233	95	
Cairo.....	Jan. 2-Mar. 4.....	81	7	
Finland.....				Apr. 16-May 31, 1919: Cases, 357.
Provinces—				
Abo Och Bjorneborg.....	Apr. 16-May 31.....	8		
Kuopio.....	do.....	45		
Nyland.....	do.....	9		
St. Michael.....	do.....	51		
Tavastehus.....	do.....	30		
Vasa.....	do.....	7		
Viborg.....	do.....	196		
France:				
Havre.....	May 23-30.....	1		
Marseille.....	May 1-31.....		2	
Paris.....	May 11-June 28.....	17	6	
Gibraltar.....	June 28-July 5.....		2	One from Bay.
Great Britain:				
Cardiff.....	June 15-July 5.....	4		
Dundee.....	June 1-7.....	1		
Glasgow.....	June 8-21.....	5		
London.....	May 25-July 5.....	12		
Greece:				
Saioniki.....	May 15-June 7.....		28	
India:				
Bombay.....	Apr. 28-June 7.....	639	221	
Calcutta.....	May 4-June 14.....		400	
Karachi.....	May 4-June 21.....	28	17	
Madras.....	May 18-24.....	23	11	
Rangoon.....	Apr. 28-June 7.....	162	75	
Indo-China:				
Cochin-China—				
Saigon.....	Apr. 21-May 18.....	11	4	City and district.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to Aug. 15, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Italy:				
Leghorn.....	June 16-29.....	2	.....	Province, June 8-21, 1919: Cases, 23; deaths, 3.
Messina.....	June 1-21.....	13	.....
Milan.....	Mar. 1-Apr. 30.....	20	5	
Milazzo.....	June 1-7.....	1	1	
Naples.....	June 2-22.....	96	79	
Palermo.....	May 2-June 20.....	39	5	
Turin.....	May 18-June 29.....	5	1	
Venice.....	May 26-June 1.....	2	.....
Japan:				
Kobe.....	May 4-July 5.....	165	74	Entire island.
Nagoya.....	June 1-7.....	1	1	
Taiwan Island.....	May 21-July 1.....	10	5	
Tokyo.....	May 1-June 5.....	2	.....
Yokohama.....	May 26-June 1.....	1	.....
Java:				
East Java.....	.....	.....	.....	Apr. 9-15, 1919: Cases, 1.
West Java.....	.....	.....	.....	May 2-June 5, 1919: Cases, 419; deaths, 81.
Batavia.....	Apr. 18-June 5.....	4	1	
Manchuria:				
Dairen.....	May 13-June 2.....	3	2	
Mesopotamia:				
Bagdad.....	May 29-30.....	1	.....
Mexico:				
Mexico City.....	June 1-July 5.....	20	1	In State of Oaxaca.
Piedras Negras.....	June 22-28.....	2	2	
San Jeronimo.....	June 17-30.....	5	.....
Vera Cruz.....	July 6-19.....	4	.....
Newfoundland:				
St. Johns.....	June 13-July 4.....	3	.....	June 13-July 25, 1919: Outports, 35 cases.
Philippine Islands:				
Manila.....	May 11-17.....	1	.....
Portugal:				
Oporto.....	June 2-28.....	37	9	
Portuguese East Africa:				
Lourenco Marques.....	Apr. 1-May 31.....	2	1	
Siberia:				
Vladivostok.....	June 8-15.....	23	.....
Spain:				
Almeria.....	May 18-June 16.....	48	5	From vessel. Mar. 22, 1919: Present in villages in vicinity.
Barcelona.....	May 15-June 19.....	3	6	
Bilbao.....	May 1-10.....	1	.....
Cadiz.....	Apr. 1-May 31.....	.....	5	
Madrid.....	May 1-31.....	3	.....
Valencia.....	May 11-June 7.....	174	12	
Vigo.....	Apr. 12.....	2	.....
Straits Settlements:				
Singapore.....	Mar. 24-May 10.....	4	2	
Tunis:				
Tunis.....	June 15-28.....	2	1	
On vessels:				
S. S. Eastern.....	Apr. 25-26.....	2	1	Death at sea. Second case landed at Woodman's Quarantine Station, Fremantle, Australia, Apr. 29. Vessel from England via Egypt and Colombo.
S. S. Kara.....	Apr. 19.....	1	.....	Landed at Colombo. Vessel from the United Kingdom via Egypt and Colombo.
S. S. Khyber.....	Apr. 10-May 4.....	4	.....	From Liverpool, via Port Said, Suez, and Colombo. One case landed at Port Said Apr. 10, 2 cases at Colombo Apr. 22, 1 at quarantine, Fremantle, Australia, May 4, 1919.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to Aug. 15, 1919—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	May 1-31.....	76	8	
Austria.....				Mar. 23-Apr. 5, 1919: Cases, 118.
Vienna.....	Mar. 23-Apr. 5.....	9		
China:				
Changsha.....	May 11-17.....	1	1	
Chosen (Korea):				
Chemulpo.....	Apr. 1-May 31.....	54	8	
Fusan.....	May 1-31.....	4	1	
Seoul.....	Apr. 1-May 31.....	79	14	
Czecho-Slovakia:				
Prague.....	May 18-24.....	1		
Egypt:				
Alexandria.....	May 14-June 24.....	425	236	
Cairo.....	Jan. 2-Mar. 4.....	150	66	
Port Said.....	Jan. 9-Mar. 4.....	6	4	
Finland.....				Apr. 16-May 31, 1919: Cases, 16.
Provinces—				
Abo Oeh Bjorneborg.....	May 15.....	1		
Nyland.....	Apr. 16-May 31.....	4		
St. Michael.....	Apr. 16-May 15.....	8		
Viborg.....	do.....	3		
Germany.....	Jan. 12-Feb. 22.....	344		Military.
Do.....	Feb. 23-Mar. 22.....	220		Civil.
Do.....	Mar. 23-Apr. 12.....	333		Civil, military, prisoners of war, deserters.
Great Britain:				
Glasgow.....	June 8-July 5.....	13	2	
Dundee.....	June 30-July 5.....	3		
Greece:				
Saloniki.....	May 15-June 7.....		5	
Hungary.....				Feb. 24-May 9, 1919: Cases, 258.
Budapest.....	Feb. 24-May 9.....	124	6	
Debreczin.....	do.....	42		
Italy.....				Apr. 28-June 8, 1919: Cases, 3,470—Austrian prisoners, 3,321; Italian soldiers, 82; civil population, 67.
Genoa.....	June 25-July 1.....	62		17 Austrian prisoners.
Naples.....	May 12-June 22.....	50	16	
Do.....	June 30-July 15.....	4		
Venice.....	Apr. 27-June 14.....	58	9	
Trieste.....	June 6-12.....	1		
Japan:				
Nagasaki.....	June 16-July 1.....	3		
Mesopotamia:				
Bagdad.....	Apr. 19-June 6.....	34	22	
Mexico:				
Mexico City.....	May 4-July 12.....	243		
Newfoundland:				
St. Johns.....	June 21-27.....	1		From vessel.
Palestine:				
Jaffa.....				Oct. 22-Dec. 22, 1918: Cases, 8; deaths, 3.
Portugal:				
Lisbon.....	June 22-28.....	1		
Oporto.....	June 1-15.....	52		
Siberia:				
Vladivostok.....	June 9-15.....	90		
Spain:				
Barcelona.....	May 15-21.....		1	
Madrid.....	May 1-31.....		1	
Tunis:				
Tunis.....	May 24-June 21.....	3	1	

August 22, 1919.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from June 28 to Aug. 15, 1919—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Apr. 12-June 14...	48	15	Jan. 12-May 17, 1919: Cases, 43, deaths 25. July 29, 1919, reported seriously prevalent in States of Bahia and Pernambuco.
Ecuador:				
Guayaquil.....	May 1-31.....	1	1	
Naranjito.....	May 1-June 15....	2	1	
Mexico:				
Merida.....	June 30-July 26...	17	7	State of Yucatan.
Peru:				
Paita.....	July 10-22.....	8	5	Department of Piura.
Piura.....	do.....	46	10	Do.
Salvador:				
La Union.....	July 6.....	2	.....
St. Miguel.....	June 24-July 6....	4	.....
San Salvador.....	do.....	1	1	75 miles from city of San Salvador.